

Bryan W. Shaw, Ph.D., P.E., *Chairman*
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Richard A. Hyde, P.E., *Executive Director*



TEXAS
COMMISSION
ON ENVIRONMENTAL
QUALITY

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CHIEF CLERKS OFFICE

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

March 3, 2014

Bridget C. Bohac
Texas Commission on Environmental Quality
Office of the Chief Clerk, MC-105
P.O. Box 13087
Austin, Texas 78711-3087

Re: Application by Algonquin Water Resources of Texas, LLC for a Major
Amendment to Permit No. WQ0013849001; TCEQ Docket No. 2013-2137-MWD

Dear Ms. Bohac:

I have enclosed the Executive Director's Response to Hearing Requests. Please let me know if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Alicia Ramirez".

Alicia Ramirez
Staff Attorney
Environmental Law Division

Enclosure

cc: Mailing List

TPDES Permit No. WQ0013849001

APPLICATION BY ALGONQUIN	§	BEFORE THE TEXAS
WATER RESOURCES OF TEXAS,	§	
LLC FOR A MAJOR AMENDMENT	§	COMMISSION ON
TO PERMIT NO. WQ0013849001	§	ENVIRONMENTAL QUALITY

EXECUTIVE DIRECTOR'S RESPONSE TO HEARING REQUESTS

The Executive Director (ED) of the Texas Commission on Environmental Quality (Commission or TCEQ) files this Response to Hearing Requests on Algonquin Water Resources of Texas, LLC's (Applicant's) application for a major amendment to Permit No. WQ0013849001 to convert from disposal via irrigation to discharge into water in the state under the Texas Pollutant Discharge Elimination Permit System (TPDES). Timely hearing requests were submitted by Joe Freeland on behalf of the City of Tyler (City) and Brad Castleberry on behalf of the Upper Neches River Municipal Water Authority (UNRMWA).

Attached for Commission consideration are the following:

- Attachment A – GIS map of the area
- Attachment B – Fact Sheet and ED's Preliminary Decision
- Attachment C – Proposed permit
- Attachment D – ED's Response to Public Comment (RTC)
- Attachment E – Compliance history report

I. FACILITY DESCRIPTION

The Applicant has applied to the TCEQ for a major amendment to Permit No. WQ0013849001 to authorize a change in the method of effluent disposal from irrigation to discharge into water in the state. The current permit authorizes the disposal of treated domestic wastewater at a daily average flow not to exceed 200,000 gallons per day via surface irrigation system with a minimum area of 72 acres of non-public access grass land. The proposed TPDES permit would authorize discharge into water in the state at a daily average flow not to exceed 200,000 gallons per day.

The facility is located approximately 1,250 feet northwest of the intersection of State Highway 155 and Farm-to-Market Road 2661 in Smith County, Texas. The Big Eddy Wastewater Treatment facility serves the Villages Resort and commercial customers. The effluent limitations in the proposed permit, based on a 30-day average, are 10 mg/l CBOD₅, 15 mg/l TSS, 3 mg/l NH₃-N, 126 CFU or MPN of *E. coli* per 100 ml and 4.0 mg/l minimum dissolved oxygen (DO). The effluent shall contain a chlorine residual of at least 1.0 mg/l and shall not exceed a chlorine residual of 4.0 mg/l after a detention time of at least 20 minutes based on peak flow.

The treated effluent will be discharged to an unnamed tributary of Rose Branch; then to Rose Branch; then to Lake Palestine in Segment No. 0605 of the Neches River Basin. The unclassified receiving water uses are no significant aquatic life use for the unnamed tributary of Rose Branch and high aquatic life use for Rose Branch. The designated uses for Segment No. 0605 are high aquatic life use, public water supply and primary contact recreation. A Tier 1 and Tier 2 antidegradation review were conducted for this application. Following the review, the ED has preliminarily determined that no lowering of water quality by more than a de minimis extent is expected in Rose Branch or Lake Palestine.

II. BACKGROUND

The application was received on January 03, 2013 and declared administratively complete on February 19, 2013. The Notice of Receipt of Application and Intent to Obtain Water Quality Permit (NORI) was published on March 14, 2013 in the *Tyler Morning Telegraph* and on March 20, 2013 in *La Opinion*. Following a technical review of the application, the ED prepared a draft permit. The Notice of Application and Preliminary Decision (NAPD) was published July 21, 2013 in the *Tyler Morning Telegraph* and on July 24, 2013 in *La Opinion* and the comment period closed August 23, 2013. The RTC was filed on October 28, 2013. The ED Final Decision Letter was mailed on October 30, 2013 and the hearing request and request for reconsideration period ended on December 2, 2013. This application was administratively complete on or after September 1, 1999; therefore, this application is subject to the procedural requirements adopted pursuant to House Bill 801 (76th Legislature, 1999).

III. EVALUATION PROCESS FOR HEARING REQUESTS

The regulations governing requests for contested case hearings are found at Title 30 of the Texas Administrative Code (TAC) Chapter 55. 30 TAC §§ 55.201(c) and (d) require that a request for a contested case hearing by an affected person must comply with the following:

Under 30 TAC § 55.201 (c), a request for a contested case hearing by an affected person must be in writing, must be filed with the chief clerk within the time provided by subsection (a) of this section, and may not be based on an issue that was raised solely in a public comment withdrawn by the commenter in writing by filing a withdrawal letter with the chief clerk prior to the filing of the Executive Director's Response to Comment.

According to section 55.201(d), a hearing request must substantially comply with the following:

- 1) give the name, address, daytime telephone number, and where possible, fax number of the person who files the request. If the request is made by a group or association, the request must identify one person by name, address, daytime telephone number, and where possible, fax number, who

- shall be responsible for receiving all official communications and documents for the group;
- 2) identify the person's personal justiciable interest affected by the application, including a brief, but specific, written statement explaining in plain language the requestor's location and distance relative to the proposed facility or activity that is the subject of the application and how and why the requestor believes he or she will be adversely affected by the proposed facility or activity in a manner not common to members of the general public;
 - 3) request a contested case hearing;
 - 4) list all relevant and material disputed issues of fact that were raised during the public comment period and that are the basis of the hearing request. To facilitate the commission's determination of the number and scope of issues to be referred to hearing, the requestor should, to the extent possible, specify any of the ED's responses to comments that the requestor disputes and the factual basis of the dispute and list any disputed issues of law or policy; and
 - 5) provide any other information specified in the public notice of application.

In addition to requesting a contested case hearing, a person must be an "affected person" as defined in 30 TAC § 55.203(a). The rule defines an affected person as "one who has a personal justiciable interest related to a legal right, duty, privilege, power, or economic interest affected by the application. An interest common to members of the general public does not qualify as a personal justiciable interest."

In making an "affected person" determination, 30 TAC § 55.203(c) lists factors to consider, including:

- 1) whether the interest claimed is one protected by the law under which the application will be considered;
- 2) distance restrictions or other limitations imposed by law on the affected interest;
- 3) whether a reasonable relationship exists between the interest claimed and the activity regulated;
- 4) the likely impact of the regulated activity on the health and safety of the person, and on the use of property of the person;
- 5) the likely impact of the regulated activity on use of the impacted natural resource by the person; and
- 6) for governmental entities, their statutory authority over or interest in the issues relevant to the application.

If the Commission determines that the hearing request is timely and that the requestor is an affected person, the Commission applies the following test from 30 TAC § 55.211(c)(2)(A) to the issues raised to determine if any of the issues should be referred to the State Office of Administrative Hearings (SOAH) for a contested case hearing:

- 1) does the issue involve questions of fact, not questions strictly of law or policy;
- 2) was it raised during the public comment period;
- 3) was it withdrawn; and
- 4) is it relevant and material to the Commission's decision on the application.

IV. ANALYSIS OF HEARING REQUESTS

A. Whether the Requestors Complied with Section 55.201(c) and (d)

Both UNRMWA and the City submitted timely written hearing requests that included relevant contact information and raised disputed issues. The ED concludes that the hearing requests substantially comply with the section 55.201(c) and (d) requirements.

B. Whether the Requestors Meet the Affected Person Requirements

1) UNRMWA

UNRMWA maintains that it is a conservation and reclamation district formed pursuant to Article XVI, Section 59 of the Texas Constitution, and that it has the power to store, control, conserve, protect, distribute, and utilize storm and floodwaters and unappropriated flow of the Neches River and its tributaries that are located within Anderson, Cherokee, Henderson, and Smith Counties. It states that it relies upon water supplies in the Neches River Basin to meet the municipal and industrial water needs of its customers and that it holds and/or has contracts for other water rights in the Neches River Basin. It finally states that it is the owner and operator of Lake Palestine. The proposed discharge route in this case is located within the Neches River Basin and includes Lake Palestine. Based on the GIS map, Lake Palestine also appears to be within one mile downstream from the discharge point.

Because UNRMWA is the owner and operator of Lake Palestine; holds the water right for Lake Palestine; gets its public water supply from Lake Palestine; and because of Lake Palestine's close proximity to the discharge point, the ED finds that UNRMWA has a personal justiciable interest related to a legal right or economic interest in Lake Palestine that could be affected by the application. The ED therefore concludes that UNRMWA meets the requirements for affected person status under 30 TAC § 55.203(a).

2) City of Tyler

The City states that it obtains a significant portion of its municipal water supply from Lake Palestine, and that it currently pumps 20 MGD from Lake Palestine to meet drinking water needs in the City of Tyler and Smith County. It states that it has a contract to purchase up to 60 MGD in the future to meet growing drinking water needs in Smith County. Finally, the City of Tyler states that the Applicant's proposed outfall

would be located near the City's intake structure in Lake Palestine.

Based on the GIS map, the City's intake structure appears to be upstream and separated from the discharge point by a peninsula and approximately 5 lake/stream miles. At this location and distance from the discharge point, and considering the relatively small volume (200,000 gallons per day) of wastewater to be permitted, the ED believes it is unlikely that the proposed discharge would adversely impact the City's water supply.¹

Based on dissolved oxygen modeling results, the proposed effluent set of 10 mg/L CBOD₅, 3 mg/L ammonia nitrogen and 4.0 mg/L DO is predicted to be adequate to maintain the dissolved oxygen criterion of Lake Palestine. This facility does not discharge treated domestic effluent directly into Lake Palestine. The treated effluent travels approximately 0.93 miles along Rose Branch and its tributary before it gets to Lake Palestine. The discharge initially enters Lake Palestine in a clearly defined cove which is separated from the main body of the lake. A peninsula separates the main body of the lake from the area where the City obtains its water supply. Natural mixing as the treated effluent travels along Rose Branch will result in substantial dilution of the effluent before entering the cove. Additionally, natural mixing processes in the lake will result in further substantial dilution of the effluent with lake water as it moves out of the cove into the main body of the lake, further reducing the impact, if any, of the discharge on dissolved oxygen concentrations in Lake Palestine. Also, as the effluent is diluted, it will naturally diffuse in different directions and is not likely to result in lowering of water quality in the lake 4 to 5 miles upstream from the point of discharge. If the effluent ever travels to the vicinity of the City's intake, it would be so diluted that it would not have any noticeable impact on water quality. Lake Palestine was created by impounding the Neches River. It is more probable that movement of water in Lake Palestine would gravitate downstream rather than upstream.

Treated effluent discharged into water in the state from facilities regulated under the TPDES program is required to meet the Texas Surface Water Quality Standards (TSWQS). 30 TAC Chapter 307 and the "Procedures to Implement the Texas Surface Water Quality Standards," 2010 (Implementation Procedures) designate criteria for the protection of aquatic life in water in the state. The proposed permit was developed to protect human health and water quality in accordance with the TSWQS and was established to be protective of human health and the environment provided the applicant operates and maintains the facility according to TCEQ rules and the requirements in the proposed permit. The proposed permit was drafted in accordance with 30 TAC § 307 and the Implementation Procedures and should be protective of aquatic life in the receiving streams including Lake Palestine.

Because the City's intake structure is upstream and is separated from the discharge point by a peninsula and approximately 5 lake/stream miles thereby minimizing the potential for adverse impacts to the City's water supply, the ED concludes that the City does not meet the requirements for affected person status under 30 TAC § 55.203(a).

¹ See 30 TAC § 55.203(c)(4)-(5).

C. Whether Issues Raised Are Referable to SOAH for a Contested Case Hearing

The ED analyzed the issues raised in the hearing requests in accordance with the regulatory criteria and provides the following recommendations regarding whether the issues are referable to SOAH. All issues were raised during the public comment period and have not been withdrawn. All identified issues in the responses are considered disputed unless otherwise noted.

1. Whether the proposed discharge will cause nuisance odors on Lake Palestine?

The ED concludes that this issue is an issue of fact which is relevant and material to a decision on this application and therefore recommends that the Commission refer the issue to SOAH.

2. Whether the proposed discharge will cause a violation of the Texas Surface Water Quality Standards in Lake Palestine?

The ED concludes that this issue is an issue of fact which is relevant and material to a decision on this application and therefore recommends that the Commission refer the issue to SOAH.

3. Whether the proposed discharge will substantially impair the taste of the water in Lake Palestine?

The ED concludes that this issue is an issue of fact which is relevant and material to a decision on this application and therefore recommends that the Commission refer the issue to SOAH.

4. Whether the Applicant is required to demonstrate that there is an actual demand to discharge to water in the state as opposed to disposal by irrigation using a Texas Land Application permit?

Neither TCEQ rules nor the Texas Water Code require the applicant to use any particular method of disposal or discharge. The ED concludes that this issue is an issue of law which is not relevant and material to a decision on this application and therefore recommends that the Commission not refer the issue to SOAH.

5. Whether the proposed permit has adequate provisions to ensure that the Applicant will properly operate and maintain the facility, considering the Applicant's compliance history?

The ED concludes that this issue is an issue of fact which is relevant and material to a decision on this application and therefore recommends that the Commission refer the issue to SOAH.

6. Whether the proposed discharge will negatively impact human health and the

environment?

The ED concludes that this issue is an issue of fact which is relevant and material to a decision on this application and therefore recommends that the Commission refer the issue to SOAH.

7. Whether the plant is designed to handle the permitted flow?

TCEQ rules do not require an applicant to construct a wastewater treatment plant prior to applying for a wastewater discharge permit. The applicant is required to submit plans and specifications under Chapter 217 of the Commission rules to ensure that the design of the plant will be able to handle the permitted flow and meet the effluent requirements and other provisions in the permit. Finally, "a person may not commence construction of a treatment facility until the commission has issued a permit to authorize the discharge of waste from the facility, except with the approval of the commission."² The applicant has not requested an authorization to construct as part of this application and therefore it should not be required to answer the question at this stage whether the contemplated plant is designed to handle the permitted flow.

The ED concludes that this issue is an issue of law which is not relevant and material to a decision on this application and therefore recommends that the Commission not refer the issue to SOAH.

8. Whether the flow rate contained in the proposed permit is appropriate?

The ED concludes that this issue is an issue of fact which is relevant and material to a decision on this application and therefore recommends that the Commission refer the issue to SOAH.

9. Whether the Applicant should be required to consider other regional alternatives?

The ED concludes that this issue is an issue of fact which is relevant and material to a decision on this application and therefore recommends that the Commission refer the issue to SOAH.

V. DURATION OF THE CONTESTED CASE HEARING

Should there be a contested case hearing on this application, the ED recommends that the duration for the hearing be nine months from the preliminary hearing to the presentation of a proposal for decision to the Commission.

² Texas Water Code § 26.027(c).

VI. CONCLUSION

- A. The ED recommends that you grant UNRMWA'S hearing request because it is an affected person under 30 TAC § 55.203(a) and it has raised referable issues.
- B. The ED recommends that you deny the City of Tyler's hearing request because it is not an affected person under 30 TAC § 55.203(a).

Respectfully submitted,

TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY

Richard A. Hyde, P.E., Executive Director

Robert Martinez, Director
Environmental Law Division

By: 

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DOCKET NO. 2013-2138-MWD; PERMIT NO. WQ0013849001

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ATTACHMENT A
GIS map of the area

Algonquin Water Resources of Texas, LLC.

Map Requested by TCEQ Office of Legal Services
for Commissioners' Agenda

Requestors

1. City of Tyler
2. Upper Neches River Municipal Water Authority (UNRMWA)

Protecting Texas by
Reducing and
Preventing Pollution



Texas Commission on Environmental Quality
GIS Team, (M&I Code 197)
P.O. Box 13087
Austin, Texas 78711-3087

February 20, 2014

Projection: Texas Centric Mapping System
Albers (TCMS-A), meters
Scale 1:30,377

Legend

- Outfall
- └ 1 mile downstream
- Discharge Route
- Facility
- Watercourse

Tyler, TX ETJ - ~1.8 mi
from facility

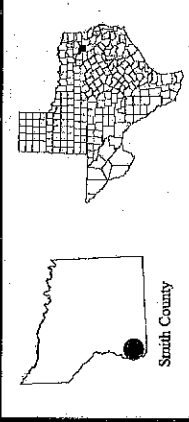
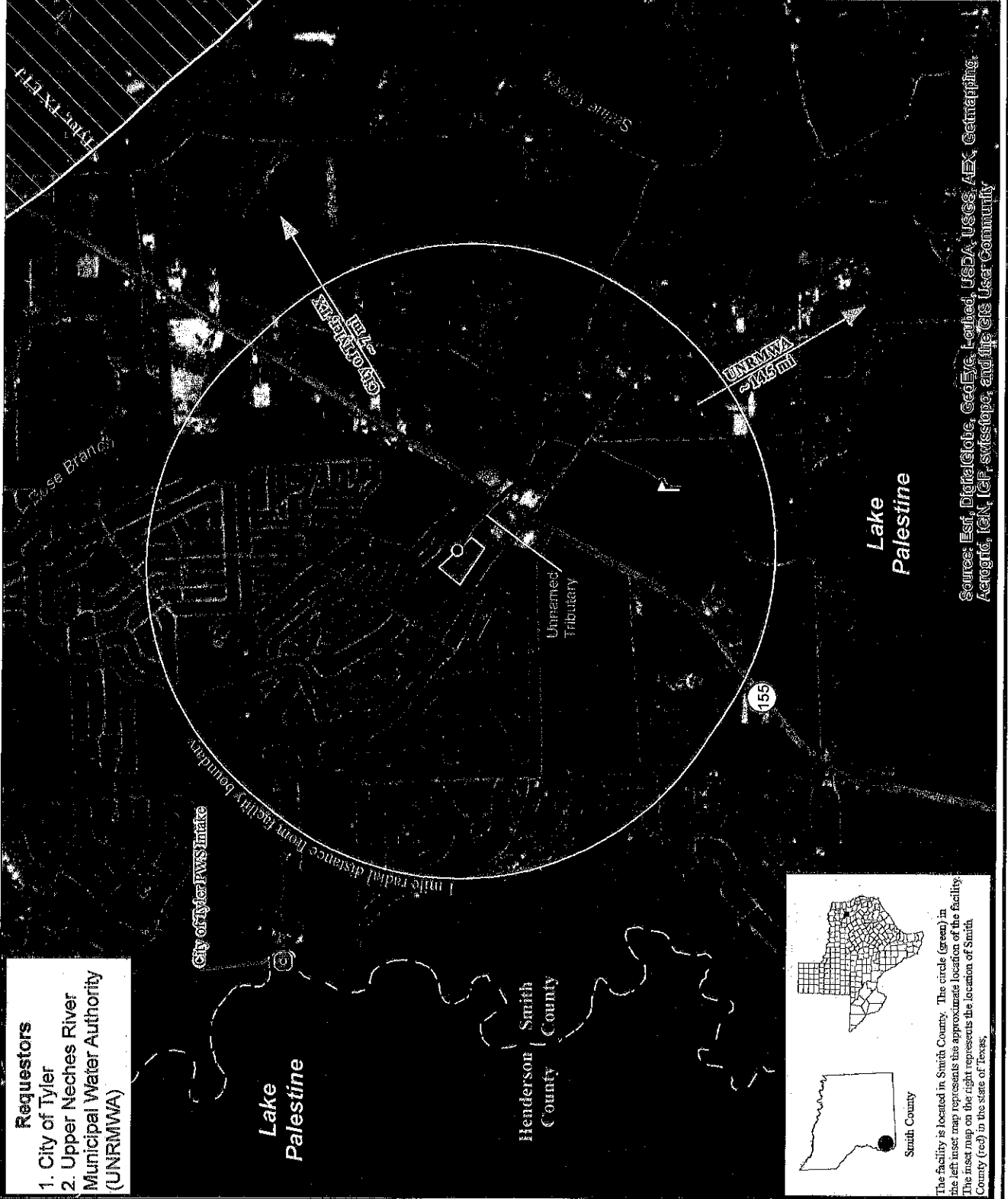


Miles
0 0.25 0.5

Source: The location of the facility was provided by the TCEQ Office of Legal Services (OLS). OLS obtained the site location information from the applicant and the requestor information from the requestor. The background imagery of this map is from the current Environmental Systems Research Institute (ESRI) map service, as of the date of this map.

This map was generated by the Information Resources Division of the Texas Commission on Environmental Quality. This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries. For more information concerning this map, contact the Information Resource Division at (512) 239-0800.

C. Schaefer, CRE-114519



The facility is located in Smith County. The circle (green) in the left inset map represents this approximate location of the facility. The first map on the right represents the location of Smith County (red) in the state of Texas.

Source: Esri, DigitalGlobe, GeoEye, Earthstar, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

ATTACHMENT B
Statement of Basis and ED's Preliminary Decision

**STATEMENT OF BASIS/TECHNICAL SUMMARY
AND EXECUTIVE DIRECTOR'S PRELIMINARY DECISION**

DESCRIPTION OF APPLICATION

Applicant: Algonquin Water Resources of Texas, LLC;
Texas Pollutant Discharge Elimination System (TPDES) Permit No.
WQ0013849001, TX0134252

Regulated Activity: Domestic Wastewater Permit

Type of Application: Major Amendment

Request: Major Amendment, Changing from a TLAP to TPDES.

Authority: Federal Clean Water Act (CWA) § 402; Texas Water Code (TWC) §
26.027; 30 TAC Chapters 30, 305, 307, 309, 312, and 319; Commission
policies; and EPA guidelines.

EXECUTIVE DIRECTOR RECOMMENDATION

The Executive Director has made a preliminary decision that this permit, if issued, meets all statutory and regulatory requirements. The draft permit includes an expiration date of **August 01, 2016** according to 30 TAC § 305.71, Basin Permitting.

REASON FOR PROJECT PROPOSED

The applicant has applied to the Texas Commission on Environmental Quality (TCEQ) for an amendment (Changing from a TLAP to TPDES) of the existing permit to authorize discharge at a daily average flow not to exceed 0.20 million gallons per day. The existing wastewater treatment facility serves the Villages Resort buildings located approximately 2 miles north northwest of the treatment facility and commercial customers within 0.50 mile of the intersection of Hwy 155 and FM 2661.

PROJECT DESCRIPTION AND LOCATION

The Big Eddy Wastewater Treatment Facility is an activated sludge process plant operated in the extended aeration mode. Treatment units operating in parallel include bar screen, aeration basins, final clarifiers, and a chlorine contact chamber. The facility is operating in the Final phase.

Sludge generated from the treatment facility is hauled by a registered transporter and disposed of at a TCEQ authorized land application site. The draft permit authorizes the disposal of sludge at a TCEQ authorized land application site or co-disposal landfill.

The plant site is located approximately 1,250 feet northwest of the intersection of State Highway 155 and Farm-to-Market Road 2661 in Smith County, Texas 75762.

The treated effluent will be discharged to an unnamed tributary of Rose Branch; thence to Rose Branch; thence to Lake Palestine in Segment No. 0605 of the Neches River Basin. The unclassified receiving water uses are no significant aquatic life use for the unnamed tributary of Rose Branch and high aquatic life use for Rose Branch. The designated uses for Segment No. 0605 are high aquatic life use, public water supply and primary contact recreation. The effluent limitations in the draft permit will maintain and protect the existing instream uses. In accordance with §307.5 and the TCEQ implementation procedures (January 2003) for the Texas Surface Water Quality Standards, an antidegradation review of the receiving waters was performed. A Tier 1 antidegradation review has

preliminarily determined that existing water quality uses will not be impaired by this permit action. Numerical and narrative criteria to protect existing uses will be maintained. A Tier 2 review has preliminarily determined that no significant degradation of water quality is expected in Rose Branch and Lake Palestine, which have been identified as having high aquatic life use. Existing uses will be maintained and protected. The preliminary determination can be reexamined and may be modified if new information is received.

Effluent limitations for the conventional effluent parameters (i.e., Biochemical Oxygen Demand or Carbonaceous Biochemical Oxygen Demand, Ammonia Nitrogen, etc.) are based on stream standards and waste load allocations for water quality limited streams as established in the Texas Surface Water Quality Standards and the State of Texas Water Quality Management Plan (WQMP).

The effluent limits recommended above have been reviewed for consistency with the State of Texas Water Quality Management Plan (WQMP). The proposed limits are not contained in the approved WQMP. However, these limits will be included in the next WQMP update. A Waste Load Evaluation has not been completed for this segment.

The discharge from this permit action is not expected to have an effect on any federal endangered or threatened aquatic or aquatic dependent species or proposed species or their critical habitat. This determination is based on the United States Fish and Wildlife Service's (USFWS) biological opinion on the State of Texas authorization of the Texas Pollutant Discharge Elimination System (TPDES, September 14, 1998; October 21, 1998 update). To make this determination for TPDES permits, TCEQ and EPA only considered aquatic or aquatic dependent species occurring in watersheds of critical concern or high priority as listed in Appendix A of the USFWS biological opinion. The determination is subject to reevaluation due to subsequent updates or amendments to the biological opinion. The permit does not require EPA review with respect to the presence of endangered or threatened species.

Segment 0605 is currently listed on the State's inventory of impaired and threatened waters (the 2010 Clean Water Act Section 303(d) list). The listings are for pH in the upper mid-lake including the Tyler Public Water Supply intake (AU 0605_03), in the Flat Creek Arm (AU 0605_09) and in the upper lake (AU 0605_10). This facility when operated properly should not contribute to the elevated pH impairment of the segment.

SUMMARY OF EFFLUENT DATA

Self-reporting data is not available since the facility is currently a TLAP facility which is not required to provide monthly DMR data.

DRAFT PERMIT CONDITIONS

The draft permit authorizes a discharge of treated domestic wastewater at a volume not to exceed a daily average flow of 0.20 million gallons per day.

The effluent limitations of the draft permit, based on a 30-day average, are 10 mg/l CBOD₅, 15 mg/l TSS, 3 mg/l NH₃-N, 126 CFU or MPN of *E. coli* per 100 ml and 4.0 mg/l minimum dissolved oxygen (DO). The effluent shall contain a chlorine residual of at least 1.0 mg/l and shall not exceed a chlorine residual of 4.0 mg/l after a detention time of at least 20 minutes based on peak flow.

The draft permit includes Sludge Provisions according to the requirements of 30 TAC Chapter 312, Sludge Use, Disposal and Transportation. The draft permit authorizes the disposal of sludge at a TCEQ authorized land application site or co-disposal landfill.

SUMMARY OF CHANGES FROM APPLICATION

See the next section for additional changes based on the existing permit.

SUMMARY OF CHANGES FROM EXISTING PERMIT

The Interim and Final phases in the existing permit for the disposal of treated domestic wastewater via surface irrigation system with a minimum area of non-public access grass land have been deleted since they are no longer required. The draft permit authorizes the discharge of treated domestic wastewater at a daily average flow not to exceed 0.20 million gallons per day (MGD).

E. coli bacteria limits have been added to the draft permit in accordance with the recent amendments to 30 TAC Chapters 309 and 319.

The Standard Permit Conditions, Sludge Provisions, and Other Requirements sections of the draft permit have been updated.

The facility is operating in the Final phase, thus the Interim I and II phases of the existing permit have been deleted from the proposed draft permit.

Flow totalizing meter is required under 30 TAC Chapter 217.

Authorization to dispose of effluent by irrigation has been removed from the permit.

Provision No. 4 on page 22 in the existing permit has been fulfilled therefore it has been removed from the draft permit.

At the applicant's request the 2 hour peak flow has been reduced to 333 gpm.

BASIS FOR DRAFT PERMIT

The following items were considered in developing the draft permit:

1. Application received January 03, 2013 and additional information received February 19, 2013.
2. TPDES Permit No. WQ0013849001 issued February 27, 2009.
3. The effluent limitations and conditions in the draft permit comply with the Texas Surface Water Quality Standards, 30 TAC §§ 307.1 - 307.10, effective August 17, 2000 and the EPA approved portions of the 2010 Texas Surface Water Quality Standards, effective July 22, 2010.
4. The effluent limitations in the draft permit meet the requirements for secondary treatment and the requirements for disinfection according to 30 TAC Chapter 309, Subchapter A: Domestic Wastewater Effluent Limitations.
5. Interoffice memoranda from the Water Quality Assessment Section of the TCEQ Water Quality Division.
6. Consistency with the Coastal Management Plan: The facility is not located in the Coastal Management Program boundary.

7. "Procedures to Implement the Texas Surface Water Quality Standards", Texas Commission on Environmental Quality, January 2003.
8. Texas 2010 Clean Water Act Section 303(d) List, Texas Commission on Environmental Quality, August 25, 2010; approved by the EPA November 18, 2011.
9. TNRCC Guidance Document for Establishing Monitoring Frequencies for Domestic and Industrial Wastewater Discharge Permits, Document No. 98-001.000-OWR-WQ, May 1998.

PROCEDURES FOR FINAL DECISION

When an application is declared administratively complete, the Chief Clerk sends a letter to the applicant advising the applicant to publish the Notice of Receipt of Application and Intent to Obtain Permit in the newspaper. In addition, the Chief Clerk instructs the applicant to place a copy of the application in a public place for review and copying in the county where the facility is or will be located. This application will be in a public place throughout the comment period. The Chief Clerk also mails this notice to any interested persons and, if required, to landowners identified in the permit application. This notice informs the public about the application, and provides that an interested person may file comments on the application or request a contested case hearing or a public meeting.

Once a draft permit is completed, it is sent, along with the Executive Director's preliminary decision, as contained in the technical summary or fact sheet, to the Chief Clerk. At that time, Notice of Application and Preliminary Decision will be mailed to the same people and published in the same newspaper as the prior notice. This notice sets a deadline for making public comments. The applicant must place a copy of the Executive Director's preliminary decision and draft permit in the public place with the application. This notice sets a deadline for public comment.

Any interested person may request a public meeting on the application until the deadline for filing public comments. A public meeting is intended for the taking of public comment, and is not a contested case proceeding.

After the public comment deadline, the Executive Director prepares a response to all significant public comments on the application or the draft permit raised during the public comment period. The Chief Clerk then mails the Executive Director's Response to Comments and Final Decision to people who have filed comments, requested a contested case hearing, or requested to be on the mailing list. This notice provides that if a person is not satisfied with the Executive Director's response and decision, they can request a contested case hearing or file a request to reconsider the Executive Director's decision within 30 days after the notice is mailed.

The Executive Director will issue the permit unless a written hearing request or request for reconsideration is filed within 30 days after the Executive Director's Response to Comments and Final Decision is mailed. If a hearing request or request for reconsideration is filed, the Executive Director will not issue the permit and will forward the application and request to the TCEQ Commissioners for their consideration at a scheduled Commission meeting. If a contested case hearing is held, it will be a legal proceeding similar to a civil trial in state district court.

If the Executive Director calls a public meeting or the Commission grants a contested case hearing as described above, the Commission will give notice of the date, time, and place of the meeting or hearing.

Algonquin Water Resources of Texas, LLC
TPDES Permit No. WQ0013849001
Statement of Basis Summary Executive Directors Preliminary Decision

If a hearing request or request for reconsideration is made, the Commission will consider all public comments in making its decision and shall either adopt the Executive Director's response to public comments or prepare its own response.

For additional information about this application contact Sonia Bhuiya at (512) 239-1205.

Sonia Bhuiya
Sonia Bhuiya
Municipal Permits Team
Wastewater Permitting Section (MC 148)

4/16/13
Date

ATTACHMENT C
Proposed Permit



TPDES PERMIT NO. WQ0013849001
[For TCEQ office use only - EPA I.D.
No. TX0134252]

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
P.O. Box 13087
Austin, Texas 78711-3087

This amendment supersedes and
replaces TCEQ Permit No.
WQ0013849001 issued February 27,
2009.

PERMIT TO DISCHARGE WASTES
under provisions of
Section 402 of the Clean Water Act
and Chapter 26 of the Texas Water Code

Algonquin Water Resources of Texas, LLC

whose mailing address is

12725 West Indian School Road, Suite D 101
Avondale, Arizona 85392

is authorized to treat and discharge wastes from the Big Eddy Wastewater Treatment Facility, SIC Code 4952

located approximately 1,250 feet northwest of the intersection of State Highway 155 and Farm-to-Market Road 2661 in Smith County, Texas 75762

to an unnamed tributary of Rose Branch; thence to Rose Branch; thence to Lake Palestine in Segment No. 0605 of the Neches River Basin

only according with effluent limitations, monitoring requirements and other conditions set forth in this permit, as well as the rules of the Texas Commission on Environmental Quality (TCEQ), the laws of the State of Texas, and other orders of the TCEQ. The issuance of this permit does not grant to the permittee the right to use private or public property for conveyance of wastewater along the discharge route described in this permit. This includes, but is not limited to, property belonging to any individual, partnership, corporation, or other entity. Neither does this permit authorize any invasion of personal rights nor any violation of federal, state, or local laws or regulations. It is the responsibility of the permittee to acquire property rights as may be necessary to use the discharge route.

This permit shall expire at midnight, **August 01, 2016**.

ISSUED DATE:

For the Commission

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall Number 001

1. During the period beginning upon the date of issuance and lasting through the date of expiration, the permittee is authorized to discharge subject to the following effluent limitations:

The daily average flow of effluent shall not exceed 0.20 million gallons per day (MGD); nor shall the average discharge during any two-hour period (2-hour peak) exceed 333 gallons per minute (gpm).

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>			<u>Min. Self-Monitoring Requirements</u>	
	Daily Avg mg/l (lbs/day)	7-day Avg mg/l	Daily Max mg/l	Single Grab mg/l	Report Daily Avg. & Max. Single Grab Measurement Frequency Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous Totalization
Carbonaceous Biochemical Oxygen Demand (5-day)	10 (17)	15	25	35	One/week Grab
Total Suspended Solids	15 (25)	25	40	60	One/week Grab
Ammonia Nitrogen	3 (5.0)	6	10	15	One/week Grab
E. coli, CFU or MPN/100 ml	126	N/A	N/A	399	One/month Grab

2. The effluent shall contain a chlorine residual of at least 1.0 mg/l and shall not exceed a chlorine residual of 4.0 mg/l after a detention time of at least 20 minutes (based on peak flow), and shall be monitored five times per week by grab sample. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per month by grab sample.
4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
5. Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.
6. The effluent shall contain a minimum dissolved oxygen of 4.0 mg/l and shall be monitored once per week by grab sample.

DEFINITIONS AND STANDARD PERMIT CONDITIONS

As required by Title 30 Texas Administrative Code (TAC) Chapter 305, certain regulations appear as standard conditions in waste discharge permits. 30 TAC § 305.121 - 305.129 (relating to Permit Characteristics and Conditions) as promulgated under the Texas Water Code (TWC) §§ 5.103 and 5.105, and the Texas Health and Safety Code (THSC) §§ 361.017 and 361.024(a), establish the characteristics and standards for waste discharge permits, including sewage sludge, and those sections of 40 Code of Federal Regulations (CFR) Part 122 adopted by reference by the Commission. The following text includes these conditions and incorporates them into this permit. All definitions in TWC § 26.001 and 30 TAC Chapter 305 shall apply to this permit and are incorporated by reference. Some specific definitions of words or phrases used in this permit are as follows:

1. Flow Measurements

- a. Annual average flow - the arithmetic average of all daily flow determinations taken within the preceding 12 consecutive calendar months. The annual average flow determination shall consist of daily flow volume determinations made by a totalizing meter, charted on a chart recorder and limited to major domestic wastewater discharge facilities with one million gallons per day or greater permitted flow.
- b. Daily average flow - the arithmetic average of all determinations of the daily flow within a period of one calendar month. The daily average flow determination shall consist of determinations made on at least four separate days. If instantaneous measurements are used to determine the daily flow, the determination shall be the arithmetic average of all instantaneous measurements taken during that month. Daily average flow determination for intermittent discharges shall consist of a minimum of three flow determinations on days of discharge.
- c. Daily maximum flow - the highest total flow for any 24-hour period in a calendar month.
- d. Instantaneous flow - the measured flow during the minimum time required to interpret the flow measuring device.
- e. 2-hour peak flow (domestic wastewater treatment plants) - the maximum flow sustained for a two-hour period during the period of daily discharge. The average of multiple measurements of instantaneous maximum flow within a two-hour period may be used to calculate the 2-hour peak flow.
- f. Maximum 2-hour peak flow (domestic wastewater treatment plants) - the highest 2-hour peak flow for any 24-hour period in a calendar month.

2. Concentration Measurements

- a. Daily average concentration - the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar month, consisting of at least four separate representative measurements.
 - i. For domestic wastewater treatment plants - When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values in the previous four consecutive month period consisting of at least four measurements shall be utilized as the daily average concentration.

- ii. For all other wastewater treatment plants - When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values taken during the month shall be utilized as the daily average concentration.
- b. 7-day average concentration - the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar week, Sunday through Saturday.
- c. Daily maximum concentration - the maximum concentration measured on a single day, by the sample type specified in the permit, within a period of one calendar month.
- d. Daily discharge - the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in terms of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the sampling day.

The daily discharge determination of concentration made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the daily discharge determination of concentration shall be the arithmetic average (weighted by flow value) of all samples collected during that day.

- e. Bacteria concentration (*E. coli* or Enterococci) - Colony Forming Units (CFU) or Most Probable Number (MPN) of bacteria per 100 milliliters effluent. The daily average bacteria concentration is a geometric mean of the values for the effluent samples collected in a calendar month. The geometric mean shall be determined by calculating the n th root of the product of all measurements made in a calendar month, where n equals the number of measurements made; or, computed as the antilogarithm of the arithmetic mean of the logarithms of all measurements made in a calendar month. For any measurement of bacteria equaling zero, a substituted value of one shall be made for input into either computation method. If specified, the 7-day average for bacteria is the geometric mean of the values for all effluent samples collected during a calendar week.
- f. Daily average loading (lbs/day) - the arithmetic average of all daily discharge loading calculations during a period of one calendar month. These calculations must be made for each day of the month that a parameter is analyzed. The daily discharge, in terms of mass (lbs/day), is calculated as $(\text{Flow, MGD} \times \text{Concentration, mg/l} \times 8.34)$.
- g. Daily maximum loading (lbs/day) - the highest daily discharge, in terms of mass (lbs/day), within a period of one calendar month.

3. Sample Type

- a. Composite sample - For domestic wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC § 319.9 (a). For industrial wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC § 319.9 (b).

- b. Grab sample - an individual sample collected in less than 15 minutes.
- 4. Treatment Facility (facility) - wastewater facilities used in the conveyance, storage, treatment, recycling, reclamation and/or disposal of domestic sewage, industrial wastes, agricultural wastes, recreational wastes, or other wastes including sludge handling or disposal facilities under the jurisdiction of the Commission.
- 5. The term "sewage sludge" is defined as solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in 30 TAC Chapter 312. This includes the solids that have not been classified as hazardous waste separated from wastewater by unit processes.
- 6. Bypass - the intentional diversion of a waste stream from any portion of a treatment facility.

MONITORING AND REPORTING REQUIREMENTS

1. Self-Reporting

Monitoring results shall be provided at the intervals specified in the permit. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall conduct effluent sampling and reporting in accordance with 30 TAC §§ 319.4 - 319.12. Unless otherwise specified, a monthly effluent report shall be submitted each month, to the Enforcement Division (MC 224), by the 20th day of the following month for each discharge which is described by this permit whether or not a discharge is made for that month. Monitoring results must be reported on an approved self-report form that is signed and certified as required by Monitoring and Reporting Requirements No. 10.

As provided by state law, the permittee is subject to administrative, civil and criminal penalties, as applicable, for negligently or knowingly violating the Clean Water Act (CWA); TWC §§ 26, 27, and 28; and THSC § 361, including but not limited to knowingly making any false statement, representation, or certification on any report, record, or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, or falsifying, tampering with or knowingly rendering inaccurate any monitoring device or method required by this permit or violating any other requirement imposed by state or federal regulations.

2. Test Procedures

- a. Unless otherwise specified in this permit, test procedures for the analysis of pollutants shall comply with procedures specified in 30 TAC §§ 319.11 - 319.12. Measurements, tests, and calculations shall be accurately accomplished in a representative manner.
- b. All laboratory tests submitted to demonstrate compliance with this permit must meet the requirements of 30 TAC § 25, Environmental Testing Laboratory Accreditation and Certification.

3. Records of Results

- a. Monitoring samples and measurements shall be taken at times and in a manner so as to be representative of the monitored activity.

- b. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503), monitoring and reporting records, including strip charts and records of calibration and maintenance, copies of all records required by this permit, records of all data used to complete the application for this permit, and the certification required by 40 CFR § 264.73(b)(9) shall be retained at the facility site, or shall be readily available for review by a TCEQ representative for a period of three years from the date of the record or sample, measurement, report, application or certification. This period shall be extended at the request of the Executive Director.
- c. Records of monitoring activities shall include the following:
 - i. date, time and place of sample or measurement;
 - ii. identity of individual who collected the sample or made the measurement.
 - iii. date and time of analysis;
 - iv. identity of the individual and laboratory who performed the analysis;
 - v. the technique or method of analysis; and
 - vi. the results of the analysis or measurement and quality assurance/quality control records.

The period during which records are required to be kept shall be automatically extended to the date of the final disposition of any administrative or judicial enforcement action that may be instituted against the permittee.

4. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit using approved analytical methods as specified above, all results of such monitoring shall be included in the calculation and reporting of the values submitted on the approved self-report form. Increased frequency of sampling shall be indicated on the self-report form.

5. Calibration of Instruments

All automatic flow measuring or recording devices and all totalizing meters for measuring flows shall be accurately calibrated by a trained person at plant start-up and as often thereafter as necessary to ensure accuracy, but not less often than annually unless authorized by the Executive Director for a longer period. Such person shall verify in writing that the device is operating properly and giving accurate results. Copies of the verification shall be retained at the facility site and/or shall be readily available for review by a TCEQ representative for a period of three years.

6. Compliance Schedule Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later

than 14 days following each schedule date to the Regional Office and the Enforcement Division (MC 224).

7. Noncompliance Notification

a. In accordance with 30 TAC § 305.125(9) any noncompliance which may endanger human health or safety, or the environment shall be reported by the permittee to the TCEQ. Report of such information shall be provided orally or by facsimile transmission (FAX) to the Regional Office within 24 hours of becoming aware of the noncompliance. A written submission of such information shall also be provided by the permittee to the Regional Office and the Enforcement Division (MC 224) within five working days of becoming aware of the noncompliance. The written submission shall contain a description of the noncompliance and its cause; the potential danger to human health or safety, or the environment; the period of noncompliance, including exact dates and times; if the noncompliance has not been corrected, the time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.

b. The following violations shall be reported under Monitoring and Reporting Requirement 7.a.:

i. Unauthorized discharges as defined in Permit Condition 2(g).

ii. Any unanticipated bypass that exceeds any effluent limitation in the permit.

iii. Violation of a permitted maximum daily discharge limitation for pollutants listed specifically in the Other Requirements section of an Industrial TPDES permit.

c. In addition to the above, any effluent violation which deviates from the permitted effluent limitation by more than 40% shall be reported by the permittee in writing to the Regional Office and the Enforcement Division (MC 224) within 5 working days of becoming aware of the noncompliance.

d. Any noncompliance other than that specified in this section, or any required information not submitted or submitted incorrectly, shall be reported to the Enforcement Division (MC 224) as promptly as possible. For effluent limitation violations, noncompliances shall be reported on the approved self-report form.

8. In accordance with the procedures described in 30 TAC §§ 35.301 - 35.303 (relating to Water Quality Emergency and Temporary Orders) if the permittee knows in advance of the need for a bypass, it shall submit prior notice by applying for such authorization.

9. Changes in Discharges of Toxic Substances

All existing manufacturing, commercial, mining, and silvicultural permittees shall notify the Regional Office, orally or by facsimile transmission within 24 hours, and both the Regional Office and the Enforcement Division (MC 224) in writing within five (5) working days, after becoming aware of or having reason to believe:

a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant listed at 40 CFR Part 122, Appendix D,

Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

- i. One hundred micrograms per liter (100 µg/L);
 - ii. Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - iii. Five (5) times the maximum concentration value reported for that pollutant in the permit application; or
 - iv. The level established by the TCEQ.
- b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - i. Five hundred micrograms per liter (500 µg/L);
 - ii. One milligram per liter (1 mg/L) for antimony;
 - iii. Ten (10) times the maximum concentration value reported for that pollutant in the permit application; or
 - iv. The level established by the TCEQ.

10. Signatories to Reports

All reports and other information requested by the Executive Director shall be signed by the person and in the manner required by 30 TAC § 305.128 (relating to Signatories to Reports).

11. All Publicly Owned Treatment Works (POTWs) must provide adequate notice to the Executive Director of the following:

- a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to CWA § 301 or § 306 if it were directly discharging those pollutants;
- b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit; and
- c. For the purpose of this paragraph, adequate notice shall include information on:
 - i. The quality and quantity of effluent introduced into the POTW; and
 - ii. Any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

PERMIT CONDITIONS

1. General

- a. When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in an application or in any report to the Executive Director, it shall promptly submit such facts or information.
- b. This permit is granted on the basis of the information supplied and representations made by the permittee during action on an application, and relying upon the accuracy and completeness of that information and those representations. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked, in whole or in part, in accordance with 30 TAC Chapter 305, Subchapter D, during its term for good cause including, but not limited to, the following:
 - i. Violation of any terms or conditions of this permit;
 - ii. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
 - iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- c. The permittee shall furnish to the Executive Director, upon request and within a reasonable time, any information to determine whether cause exists for amending, revoking, suspending or terminating the permit. The permittee shall also furnish to the Executive Director, upon request, copies of records required to be kept by the permit.

2. Compliance

- a. Acceptance of the permit by the person to whom it is issued constitutes acknowledgment and agreement that such person will comply with all the terms and conditions embodied in the permit, and the rules and other orders of the Commission.
- b. The permittee has a duty to comply with all conditions of the permit. Failure to comply with any permit condition constitutes a violation of the permit and the Texas Water Code or the Texas Health and Safety Code, and is grounds for enforcement action, for permit amendment, revocation, or suspension, or for denial of a permit renewal application or an application for a permit for another facility.
- c. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
- d. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal or other permit violation that has a reasonable likelihood of adversely affecting human health or the environment.
- e. Authorization from the Commission is required before beginning any change in the permitted facility or activity that may result in noncompliance with any permit requirements.

- f. A permit may be amended, suspended and reissued, or revoked for cause in accordance with 30 TAC §§ 305.62 and 305.66 and TWC§ 7.302. The filing of a request by the permittee for a permit amendment, suspension and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- g. There shall be no unauthorized discharge of wastewater or any other waste. For the purpose of this permit, an unauthorized discharge is considered to be any discharge of wastewater into or adjacent to water in the state at any location not permitted as an outfall or otherwise defined in the Other Requirements section of this permit.
- h. In accordance with 30 TAC § 305.535(a), the permittee may allow any bypass to occur from a TPDES permitted facility which does not cause permitted effluent limitations to be exceeded or an unauthorized discharge to occur, but only if the bypass is also for essential maintenance to assure efficient operation.
- i. The permittee is subject to administrative, civil, and criminal penalties, as applicable, under TWC §§ 7.051 - 7.075 (relating to Administrative Penalties), 7.101 - 7.111 (relating to Civil Penalties), and 7.141 - 7.202 (relating to Criminal Offenses and Penalties) for violations including, but not limited to, negligently or knowingly violating the federal CWA §§ 301, 302, 306, 307, 308, 318, or 405, or any condition or limitation implementing any sections in a permit issued under the CWA § 402, or any requirement imposed in a pretreatment program approved under the CWA §§ 402 (a)(3) or 402 (b)(8).

3. Inspections and Entry

- a. Inspection and entry shall be allowed as prescribed in the TWC Chapters 26, 27, and 28, and THSC § 361.
- b. The members of the Commission and employees and agents of the Commission are entitled to enter any public or private property at any reasonable time for the purpose of inspecting and investigating conditions relating to the quality of water in the state or the compliance with any rule, regulation, permit or other order of the Commission. Members, employees, or agents of the Commission and Commission contractors are entitled to enter public or private property at any reasonable time to investigate or monitor or, if the responsible party is not responsive or there is an immediate danger to public health or the environment, to remove or remediate a condition related to the quality of water in the state. Members, employees, Commission contractors, or agents acting under this authority who enter private property shall observe the establishment's rules and regulations concerning safety, internal security, and fire protection, and if the property has management in residence, shall notify management or the person then in charge of his presence and shall exhibit proper credentials. If any member, employee, Commission contractor, or agent is refused the right to enter in or on public or private property under this authority, the Executive Director may invoke the remedies authorized in TWC § 7.002. The statement above, that Commission entry shall occur in accordance with an establishment's rules and regulations concerning safety, internal security, and fire protection, is not grounds for denial or restriction of entry to any part of the facility, but merely describes the Commission's duty to observe appropriate rules and regulations during an inspection.

4. Permit Amendment and/or Renewal

- a. The permittee shall give notice to the Executive Director as soon as possible of any planned physical alterations or additions to the permitted facility if such alterations or additions would require a permit amendment or result in a violation of permit requirements. Notice shall also be required under this paragraph when:
 - i. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in accordance with 30 TAC § 305.534 (relating to New Sources and New Dischargers); or
 - ii. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in the permit, nor to notification requirements in Monitoring and Reporting Requirements No. 9;
 - iii. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
- b. Prior to any facility modifications, additions, or expansions that will increase the plant capacity beyond the permitted flow, the permittee must apply for and obtain proper authorization from the Commission before commencing construction.
- c. The permittee must apply for an amendment or renewal at least 180 days prior to expiration of the existing permit in order to continue a permitted activity after the expiration date of the permit. If an application is submitted prior to the expiration date of the permit, the existing permit shall remain in effect until the application is approved, denied, or returned. If the application is returned or denied, authorization to continue such activity shall terminate upon the effective date of the action. If an application is not submitted prior to the expiration date of the permit, the permit shall expire and authorization to continue such activity shall terminate.
- d. Prior to accepting or generating wastes which are not described in the permit application or which would result in a significant change in the quantity or quality of the existing discharge, the permittee must report the proposed changes to the Commission. The permittee must apply for a permit amendment reflecting any necessary changes in permit conditions, including effluent limitations for pollutants not identified and limited by this permit.
- e. In accordance with the TWC § 26.029(b), after a public hearing, notice of which shall be given to the permittee, the Commission may require the permittee, from time to time, for good cause, in accordance with applicable laws, to conform to new or additional conditions.
- f. If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under CWA § 307(a) for a toxic pollutant which is present in the discharge and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, this permit shall be

modified or revoked and reissued to conform to the toxic effluent standard or prohibition. The permittee shall comply with effluent standards or prohibitions established under CWA § 307(a) for toxic pollutants within the time provided in the regulations that established those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

5. Permit Transfer

- a. Prior to any transfer of this permit, Commission approval must be obtained. The Commission shall be notified in writing of any change in control or ownership of facilities authorized by this permit. Such notification should be sent to the Applications Review and Processing Team (MC 148) of the Water Quality Division.
- b. A permit may be transferred only according to the provisions of 30 TAC § 305.64 (relating to Transfer of Permits) and 30 TAC § 50.133 (relating to Executive Director Action on Application or WQMP update).

6. Relationship to Hazardous Waste Activities

This permit does not authorize any activity of hazardous waste storage, processing, or disposal that requires a permit or other authorization pursuant to the Texas Health and Safety Code.

7. Relationship to Water Rights

Disposal of treated effluent by any means other than discharge directly to water in the state must be specifically authorized in this permit and may require a permit pursuant to TWC Chapter 11.

8. Property Rights

A permit does not convey any property rights of any sort, or any exclusive privilege.

9. Permit Enforceability

The conditions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

10. Relationship to Permit Application

The application pursuant to which the permit has been issued is incorporated herein; provided, however, that in the event of a conflict between the provisions of this permit and the application, the provisions of the permit shall control.

11. Notice of Bankruptcy

- a. Each permittee shall notify the Executive Director, in writing, immediately following the filing of a voluntary or involuntary petition for bankruptcy under any chapter of Title 11 Bankruptcy) of the United States Code (11 USC) by or against:

- i. the permittee;
 - ii. an entity (as that term is defined in 11 USC, § 101(14)) controlling the permittee or listing the permit or permittee as property of the estate; or
 - iii. an affiliate (as that term is defined in 11 USC, § 101(2)) of the permittee.
- b. This notification must indicate:
- i. the name of the permittee and the permit number(s);
 - ii. the bankruptcy court in which the petition for bankruptcy was filed; and
 - iii. the date of filing of the petition.

OPERATIONAL REQUIREMENTS

1. The permittee shall at all times ensure that the facility and all of its systems of collection, treatment, and disposal are properly operated and maintained. This includes, but is not limited to, the regular, periodic examination of wastewater solids within the treatment plant by the operator in order to maintain an appropriate quantity and quality of solids inventory as described in the various operator training manuals and according to accepted industry standards for process control. Process control, maintenance, and operations records shall be retained at the facility site, or shall be readily available for review by a TCEQ representative, for a period of three years.
2. Upon request by the Executive Director, the permittee shall take appropriate samples and provide proper analysis in order to demonstrate compliance with Commission rules. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall comply with all applicable provisions of 30 TAC Chapter 312 concerning sewage sludge use and disposal and 30 TAC §§ 319.21 - 319.29 concerning the discharge of certain hazardous metals.
3. Domestic wastewater treatment facilities shall comply with the following provisions:
 - a. The permittee shall notify the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, in writing, of any facility expansion at least 90 days prior to conducting such activity.
 - b. The permittee shall submit a closure plan for review and approval to the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, for any closure activity at least 90 days prior to conducting such activity. Closure is the act of permanently taking a waste management unit or treatment facility out of service and includes the permanent removal from service of any pit, tank, pond, lagoon, surface impoundment and/or other treatment unit regulated by this permit.
4. The permittee is responsible for installing prior to plant start-up, and subsequently maintaining, adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failures by means of alternate power sources, standby generators, and/or retention of inadequately treated wastewater.

5. Unless otherwise specified, the permittee shall provide a readily accessible sampling point and, where applicable, an effluent flow measuring device or other acceptable means by which effluent flow may be determined.
6. The permittee shall remit an annual water quality fee to the Commission as required by 30 TAC Chapter 21. Failure to pay the fee may result in revocation of this permit under TWC § 7.302(b)(6).
7. Documentation

For all written notifications to the Commission required of the permittee by this permit, the permittee shall keep and make available a copy of each such notification under the same conditions as self-monitoring data are required to be kept and made available. Except for information required for TPDES permit applications, effluent data, including effluent data in permits, draft permits and permit applications, and other information specified as not confidential in 30 TAC §§ 1.5(d), any information submitted pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted in the manner prescribed in the application form or by stamping the words confidential business information on each page containing such information. If no claim is made at the time of submission, information may be made available to the public without further notice. If the Commission or Executive Director agrees with the designation of confidentiality, the TCEQ will not provide the information for public inspection unless required by the Texas Attorney General or a court pursuant to an open records request. If the Executive Director does not agree with the designation of confidentiality, the person submitting the information will be notified.

8. Facilities that generate domestic wastewater shall comply with the following provisions; domestic wastewater treatment facilities at permitted industrial sites are excluded.
 - a. Whenever flow measurements for any domestic sewage treatment facility reach 75% of the permitted daily average or annual average flow for three consecutive months, the permittee must initiate engineering and financial planning for expansion and/or upgrading of the domestic wastewater treatment and/or collection facilities. Whenever the flow reaches 90% of the permitted daily average or annual average flow for three consecutive months, the permittee shall obtain necessary authorization from the Commission to commence construction of the necessary additional treatment and/or collection facilities. ~~In the case of a domestic wastewater treatment facility which reaches 75% of the permitted daily average or annual average flow for three consecutive months,~~ and the planned population to be served or the quantity of waste produced is not expected to exceed the design limitations of the treatment facility, the permittee shall submit an engineering report supporting this claim to the Executive Director of the Commission.

If in the judgment of the Executive Director the population to be served will not cause permit noncompliance, then the requirement of this section may be waived. To be effective, any waiver must be in writing and signed by the Director of the Enforcement Division (MC 149) of the Commission, and such waiver of these requirements will be reviewed upon expiration of the existing permit; however, any such waiver shall not be interpreted as condoning or excusing any violation of any permit parameter.

- b. The plans and specifications for domestic sewage collection and treatment works associated with any domestic permit must be approved by the Commission and failure to secure approval before commencing construction of such works or making a discharge is a violation of this permit and each day is an additional violation until approval has been secured.
 - c. Permits for domestic wastewater treatment plants are granted subject to the policy of the Commission to encourage the development of area-wide waste collection, treatment, and disposal systems. The Commission reserves the right to amend any domestic wastewater permit in accordance with applicable procedural requirements to require the system covered by this permit to be integrated into an area-wide system, should such be developed; to require the delivery of the wastes authorized to be collected in, treated by or discharged from said system, to such area-wide system; or to amend this permit in any other particular to effectuate the Commission's policy. Such amendments may be made when the changes required are advisable for water quality control purposes and are feasible on the basis of waste treatment technology, engineering, financial, and related considerations existing at the time the changes are required, exclusive of the loss of investment in or revenues from any then existing or proposed waste collection, treatment or disposal system.
9. Domestic wastewater treatment plants shall be operated and maintained by sewage plant operators holding a valid certificate of competency at the required level as defined in 30 TAC Chapter 30.
10. For Publicly Owned Treatment Works (POTWs), the 30-day average (or monthly average) percent removal for BOD and TSS shall not be less than 85%, unless otherwise authorized by this permit.
11. Facilities that generate industrial solid waste as defined in 30 TAC § 335.1 shall comply with these provisions:
- a. Any solid waste, as defined in 30 TAC § 335.1 (including but not limited to such wastes as garbage, refuse, sludge from a waste treatment, water supply treatment plant or air pollution control facility, discarded materials, discarded materials to be recycled, whether the waste is solid, liquid, or semisolid), generated by the permittee during the management and treatment of wastewater, must be managed in accordance with all applicable provisions of 30 TAC Chapter 335, relating to Industrial Solid Waste Management.
 - b. Industrial wastewater that is being collected, accumulated, stored, or processed before discharge through any final discharge outfall, specified by this permit, is considered to be industrial solid waste until the wastewater passes through the actual point source discharge and must be managed in accordance with all applicable provisions of 30 TAC Chapter 335.
 - c. The permittee shall provide written notification, pursuant to the requirements of 30 TAC § 335.8(b)(1), to the Environmental Cleanup Section (MC 127) of the Remediation Division informing the Commission of any closure activity involving an Industrial Solid Waste Management Unit, at least 90 days prior to conducting such an activity.

- d. Construction of any industrial solid waste management unit requires the prior written notification of the proposed activity to the Registration and Reporting Section (MC 129) of the Registration, Review, and Reporting Division. No person shall dispose of industrial solid waste, including sludge or other solids from wastewater treatment processes, prior to fulfilling the deed recordation requirements of 30 TAC § 335.5.
- e. The term "industrial solid waste management unit" means a landfill, surface impoundment, waste-pile, industrial furnace, incinerator, cement kiln, injection well, container, drum, salt dome waste containment cavern, or any other structure vessel, appurtenance, or other improvement on land used to manage industrial solid waste.
- f. The permittee shall keep management records for all sludge (or other waste) removed from any wastewater treatment process. These records shall fulfill all applicable requirements of 30 TAC § 335 and must include the following, as it pertains to wastewater treatment and discharge:
 - i. Volume of waste and date(s) generated from treatment process;
 - ii. Volume of waste disposed of on-site or shipped off-site;
 - iii. Date(s) of disposal;
 - iv. Identity of hauler or transporter;
 - v. Location of disposal site; and
 - vi. Method of final disposal.

The above records shall be maintained on a monthly basis. The records shall be retained at the facility site, or shall be readily available for review by authorized representatives of the TCEQ for at least five years.

- 12. For industrial facilities to which the requirements of 30 TAC § 335 do not apply, sludge and solid wastes, including tank cleaning and contaminated solids for disposal, shall be disposed of in accordance with THSC § 361.

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SLUDGE PROVISIONS

The permittee is authorized to dispose of sludge only at a Texas Commission on Environmental Quality (TCEQ) authorized land application site or co-disposal landfill. **The disposal of sludge by land application on property owned, leased or under the direct control of the permittee is a violation of the permit unless the site is authorized with the TCEQ. This provision does not authorize Distribution and Marketing of sludge. This provision does not authorize land application of Class A Sludge. This provision does not authorize the permittee to land apply sludge on property owned, leased or under the direct control of the permittee.**

SECTION I. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE LAND APPLICATION**A. General Requirements**

1. The permittee shall handle and dispose of sewage sludge in accordance with 30 TAC § 312 and all other applicable state and federal regulations in a manner that protects public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present in the sludge.
2. In all cases, if the person (permit holder) who prepares the sewage sludge supplies the sewage sludge to another person for land application use or to the owner or lease holder of the land, the permit holder shall provide necessary information to the parties who receive the sludge to assure compliance with these regulations.
3. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the sewage sludge disposal practice.

B. Testing Requirements

1. Sewage sludge shall be tested once during the term of this permit in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I -- [Toxicity Characteristic Leaching Procedure (TCLP)] or other method that receives the prior approval of the TCEQ for the contaminants listed in 40 CFR Part 261.24, Table 1. Sewage sludge failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal. Following failure of any TCLP test, the management or disposal of sewage sludge at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Remediation Support Division and the Regional Director (MC Region 5) within seven (7) days after failing the TCLP Test.

The report shall contain test results, certification that unauthorized waste management has stopped and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Registration, Review, and Reporting Division (MC 129), Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. This annual report shall be submitted to the TCEQ Regional Office (MC Region 5) and the Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30 of each year.

2. Sewage sludge shall not be applied to the land if the concentration of the pollutants exceeds the pollutant concentration criteria in Table 1. The frequency of testing for pollutants in Table 1 is found in Section I.C.

TABLE 1

<u>Pollutant</u>	<u>Ceiling Concentration</u> (<u>Milligrams per kilogram</u>)*
Arsenic	75
Cadmium	85
Chromium	3000
Copper	4300
Lead	840
Mercury	57
Molybdenum	75
Nickel	420
PCBs	49
Selenium	100
Zinc	7500

* Dry weight basis

3. Pathogen Control

All sewage sludge that is applied to agricultural land, forest, a public contact site, or a reclamation site shall be treated by one of the following methods to ensure that the sludge meets either the Class A or Class B pathogen requirements.

- a. Six alternatives are available to demonstrate compliance with Class A sewage sludge. The first 4 options require either the density of fecal coliform in the sewage sludge be less than 1000 Most Probable Number (MPN) per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the sewage sludge be less than three MPN per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. Below are the additional requirements necessary to meet the definition of a Class A sludge.

Alternative 1 - The temperature of the sewage sludge that is used or disposed shall be maintained at or above a specific value for a period of time. See 30 TAC § 312.82(a)(2)(A) for specific information.

Alternative 2 - The pH of the sewage sludge that is used or disposed shall be raised to above 12 std. units and shall remain above 12 std. units for 72 hours.

The temperature of the sewage sludge shall be above 52° Celsius for 12 hours or longer during the period that the pH of the sewage sludge is above 12 std. units.

At the end of the 72-hour period during which the pH of the sewage sludge is above 12 std. units, the sewage sludge shall be air dried to achieve a percent solids in the sewage sludge greater than 50%.

Alternative 3 - The sewage sludge shall be analyzed for enteric viruses prior to pathogen treatment. The limit for enteric viruses is less than one Plaque-forming Unit per four grams of total solids (dry weight basis) either before or following pathogen treatment. See 30 TAC § 312.82(a)(2)(C)(i-iii) for specific information. The sewage sludge shall be analyzed for viable helminth ova prior to pathogen treatment. The limit for viable helminth ova is less than one per four grams of total solids (dry weight basis) either before or following pathogen treatment. See 30 TAC § 312.82(a)(2)(C)(iv-vi) for specific information.

Alternative 4 - The density of enteric viruses in the sewage sludge shall be less than one Plaque-forming Unit per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. The density of viable helminth ova in the sewage sludge shall be less than one per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed.

Alternative 5 (PFRP) - Sewage sludge that is used or disposed of shall be treated in one of the processes to Further Reduce Pathogens (PFRP) described in 40 CFR Part 503, Appendix B. PFRP include composting, heat drying, heat treatment, and thermophilic aerobic digestion.

Alternative 6 (PFRP Equivalent) - Sewage sludge that is used or disposed of shall be treated in a process that has been approved by the U.S. Environmental Protection Agency as being equivalent to those in Alternative 5.

- b. Three alternatives are available to demonstrate compliance with Class B criteria for sewage sludge.

Alternative 1

- i. A minimum of seven random samples of the sewage sludge shall be collected within 48 hours of the time the sewage sludge is used or disposed of during each monitoring episode for the sewage sludge.
- ii. The geometric mean of the density of fecal coliform in the samples collected shall be less than either 2,000,000 MPN per gram of total solids (dry weight basis) or 2,000,000 Colony Forming Units per gram of total solids (dry weight basis).

Alternative 2 - Sewage sludge that is used or disposed of shall be treated in one of the Processes to Significantly Reduce Pathogens (PSRP) described in 40 CFR Part 503, Appendix B, so long as all of the following requirements are met by the generator of the sewage sludge.

- i. Prior to use or disposal, all the sewage sludge must have been generated from a single location, except as provided in paragraph v. below;
- ii. An independent Texas Licensed Professional Engineer must make a certification to the generator of a sewage sludge that the wastewater treatment facility generating the sewage sludge is designed to achieve one of the PSRP at the permitted design loading of the facility. The certification need only be repeated if the design loading of the facility is increased. The certification shall include a statement indicating the design meets all the applicable standards specified in Appendix B of 40 CFR Part 503;
- iii. Prior to any off-site transportation or on-site use or disposal of any sewage sludge generated at a wastewater treatment facility, the chief certified operator of the wastewater treatment facility or other responsible official who manages the processes to significantly reduce pathogens at the wastewater treatment facility for the permittee, shall certify that the sewage sludge underwent at least the minimum operational requirements necessary in order to meet one of the PSRP. The acceptable processes and the minimum operational and record keeping requirements shall be in accordance with established U.S. Environmental Protection Agency final guidance;
- iv. All certification records and operational records describing how the requirements of this paragraph were met shall be kept by the generator for a minimum of three years and be available for inspection by commission staff for review; and
- v. If the sewage sludge is generated from a mixture of sources, resulting from a person who prepares sewage sludge from more than one wastewater treatment facility, the resulting derived product shall meet one of the PSRP, and shall meet the certification, operation, and record keeping requirements of this paragraph.

Alternative 3 - Sewage sludge shall be treated in an equivalent process that has been approved by the U.S. Environmental Protection Agency, so long as all of the following requirements are met by the generator of the sewage sludge.

- i. Prior to use or disposal, all the sewage sludge must have been generated from a single location, except as provided in paragraph v. below;
- ii. Prior to any off-site transportation or on-site use or disposal of any sewage sludge generated at a wastewater treatment facility, the chief certified operator of the wastewater treatment facility or other responsible official who manages the processes to significantly reduce pathogens at the wastewater treatment facility for the permittee, shall certify that the sewage sludge underwent at least the minimum operational requirements necessary in order to meet one of the PSRP. The acceptable processes and the minimum operational and record keeping requirements shall be in accordance with established U.S. Environmental Protection Agency final guidance;
- iii. All certification records and operational records describing how the requirements of this paragraph were met shall be kept by the generator for a minimum of three years and be available for inspection by commission staff for review;

- iv. The Executive Director will accept from the U.S. Environmental Protection Agency a finding of equivalency to the defined PSRP; and
- v. If the sewage sludge is generated from a mixture of sources resulting from a person who prepares sewage sludge from more than one wastewater treatment facility, the resulting derived product shall meet one of the Processes to Significantly Reduce Pathogens, and shall meet the certification, operation, and record keeping requirements of this paragraph.

In addition, the following site restrictions must be met if Class B sludge is land applied:

- i. Food crops with harvested parts that touch the sewage sludge/soil mixture and are totally above the land surface shall not be harvested for 14 months after application of sewage sludge.
- ii. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of sewage sludge when the sewage sludge remains on the land surface for 4 months or longer prior to incorporation into the soil.
- iii. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of sewage sludge when the sewage sludge remains on the land surface for less than 4 months prior to incorporation into the soil.
- iv. Food crops, feed crops, and fiber crops shall not be harvested for 30 days after application of sewage sludge.
- v. Animals shall not be allowed to graze on the land for 30 days after application of sewage sludge.
- vi. Turf grown on land where sewage sludge is applied shall not be harvested for 1 year after application of the sewage sludge when the harvested turf is placed on either land with a high potential for public exposure or a lawn.
- ~~vii. Public access to land with a high potential for public exposure shall be restricted for 1 year after application of sewage sludge.~~
- viii. Public access to land with a low potential for public exposure shall be restricted for 30 days after application of sewage sludge.
- ix. Land application of sludge shall be in accordance with the buffer zone requirements found in 30 TAC § 312.44.

4. Vector Attraction Reduction Requirements

All bulk sewage sludge that is applied to agricultural land, forest, a public contact site, or a reclamation site shall be treated by one of the following Alternatives 1 through 10 for vector attraction reduction.

- Alternative 1 - The mass of volatile solids in the sewage sludge shall be reduced by a minimum of 38%.
- Alternative 2 - If Alternative 1 cannot be met for an anaerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge anaerobically in the laboratory in a bench-scale unit for 40 additional days at a temperature between 30° and 37° Celsius. Volatile solids must be reduced by less than 17% to demonstrate compliance.
- Alternative 3 - If Alternative 1 cannot be met for an aerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge with percent solids of two percent or less aerobically in the laboratory in a bench-scale unit for 30 additional days at 20° Celsius. Volatile solids must be reduced by less than 15% to demonstrate compliance.
- Alternative 4 - The specific oxygen uptake rate (SOUR) for sewage sludge treated in an aerobic process shall be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20° Celsius.
- Alternative 5 - Sewage sludge shall be treated in an aerobic process for 14 days or longer. During that time, the temperature of the sewage sludge shall be higher than 40° Celsius and the average temperature of the sewage sludge shall be higher than 45° Celsius.
- Alternative 6 - The pH of sewage sludge shall be raised to 12 or higher by alkali addition and, without the addition of more alkali shall remain at 12 or higher for two hours and then remain at a pH of 11.5 or higher for an additional 22 hours at the time the sewage sludge is prepared for sale or given away in a bag or other container.
- Alternative 7 - The percent solids of sewage sludge that does not contain unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 75% based on the moisture content and total solids prior to mixing with other materials. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.
- Alternative 8 - The percent solids of sewage sludge that contains unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 90% based on the moisture content and total solids prior to mixing with other materials at the time the sludge is used. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.
- Alternative 9 -
- i. Sewage sludge shall be injected below the surface of the land.
 - ii. No significant amount of the sewage sludge shall be present on

the land surface within one hour after the sewage sludge is injected.

- iii. When sewage sludge that is injected below the surface of the land is Class A with respect to pathogens, the sewage sludge shall be injected below the land surface within eight hours after being discharged from the pathogen treatment process.

Alternative 10-

- i. Sewage sludge applied to the land surface or placed on a surface disposal site shall be incorporated into the soil within six hours after application to or placement on the land.
- ii. When sewage sludge that is incorporated into the soil is Class A with respect to pathogens, the sewage sludge shall be applied to or placed on the land within eight hours after being discharged from the pathogen treatment process.

C. Monitoring Requirements

Toxicity Characteristic Leaching Procedure (TCLP) Test	- once during the term of this permit
PCBs	- once during the term of this permit

All metal constituents and fecal coliform or *Salmonella* sp. bacteria shall be monitored at the appropriate frequency shown below, pursuant to 30 TAC § 312.46(a)(1):

<u>Amount of sewage sludge (*)</u> <u>metric tons per 365-day period</u>	<u>Monitoring Frequency</u>
0 to less than 290	Once/Year
290 to less than 1,500	Once/Quarter
1,500 to less than 15,000	Once/Two Months
15,000 or greater	Once/Month

(*) *The amount of bulk sewage sludge applied to the land (dry wt. basis).*

Representative samples of sewage sludge shall be collected and analyzed in accordance with the methods referenced in 30 TAC § 312.7

SECTION II. REQUIREMENTS SPECIFIC TO BULK SEWAGE SLUDGE FOR APPLICATION TO THE LAND MEETING CLASS A or B PATHOGEN REDUCTION AND THE CUMULATIVE LOADING RATES IN TABLE 2, OR CLASS B PATHOGEN REDUCTION AND THE POLLUTANT CONCENTRATIONS IN TABLE 3

For those permittees meeting Class A or B pathogen reduction requirements and that meet the cumulative loading rates in Table 2 below, or the Class B pathogen reduction requirements and contain concentrations of pollutants below listed in Table 3, the following conditions apply:

A. Pollutant Limits

Table 2

<u>Pollutant</u>	<u>Cumulative Pollutant Loading Rate (pounds per acre)*</u>
Arsenic	36
Cadmium	35
Chromium	2677
Copper	1339
Lead	268
Mercury	15
Molybdenum	Report Only
Nickel	375
Selenium	89
Zinc	2500

Table 3

<u>Pollutant</u>	<u>Monthly Average Concentration (milligrams per kilogram)*</u>
Arsenic	41
Cadmium	39
Chromium	1200
Copper	1500
Lead	300
Mercury	17
Molybdenum	Report Only
Nickel	420
Selenium	36
Zinc	2800

*Dry weight basis

B. Pathogen Control

All bulk sewage sludge that is applied to agricultural land, forest, a public contact site, a reclamation site, shall be treated by either Class A or Class B pathogen reduction requirements as defined above in Section I.B.3.

C. Management Practices

1. Bulk sewage sludge shall not be applied to agricultural land, forest, a public contact site, or a reclamation site that is flooded, frozen, or snow-covered so that the bulk sewage sludge enters a wetland or other waters in the State.
2. Bulk sewage sludge not meeting Class A requirements shall be land applied in a manner which complies with the Management Requirements in accordance with 30 TAC § 312.44.
3. Bulk sewage sludge shall be applied at or below the agronomic rate of the cover crop.
4. An information sheet shall be provided to the person who receives bulk sewage sludge sold or given away. The information sheet shall contain the following information:
 - a. The name and address of the person who prepared the sewage sludge that is sold or given away in a bag or other container for application to the land.
 - b. A statement that application of the sewage sludge to the land is prohibited except in accordance with the instruction on the label or information sheet.
 - c. The annual whole sludge application rate for the sewage sludge application rate for the sewage sludge that does not cause any of the cumulative pollutant loading rates in Table 2 above to be exceeded, unless the pollutant concentrations in Table 3 found in Section II above are met.

D. Notification Requirements

1. If bulk sewage sludge is applied to land in a State other than Texas, written notice shall be provided prior to the initial land application to the permitting authority for the State in which the bulk sewage sludge is proposed to be applied. The notice shall include:
 - a. The location, by street address, and specific latitude and longitude, of each land application site.
 - b. The approximate time period bulk sewage sludge will be applied to the site.
 - c. The name, address, telephone number, and National Pollutant Discharge Elimination System permit number (if appropriate) for the person who will apply the bulk sewage sludge.
2. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the sewage sludge disposal practice.

E. Record keeping Requirements

The sludge documents will be retained at the facility site and/or shall be readily available for review by a TCEQ representative. The person who prepares bulk sewage sludge or a sewage sludge material shall develop the following information and shall retain the information at

the facility site and/or shall be readily available for review by a TCEQ representative for a period of five years. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC § 312.47 for persons who land apply.

1. The concentration (mg/kg) in the sludge of each pollutant listed in Table 3 above and the applicable pollutant concentration criteria (mg/kg), or the applicable cumulative pollutant loading rate and the applicable cumulative pollutant loading rate limit (lbs/ac) listed in Table 2 above.
2. A description of how the pathogen reduction requirements are met (including site restrictions for Class B sludge, if applicable).
3. A description of how the vector attraction reduction requirements are met.
4. A description of how the management practices listed above in Section II.C are being met.
5. The following certification statement:

"I certify, under penalty of law, that the applicable pathogen requirements in 30 TAC § 312.82(a) or (b) and the vector attraction reduction requirements in 30 TAC § 312.83(b) have been met for each site on which bulk sewage sludge is applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practices have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."

6. The recommended agronomic loading rate from the references listed in Section II.C.3. above, as well as the actual agronomic loading rate shall be retained. The person who applies bulk sewage sludge or a sewage sludge material shall develop the following information and shall retain the information at the facility site and/or shall be readily available for review by a TCEQ representative indefinitely. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC § 312.47 for persons who land apply:

- a. A certification statement that all applicable requirements (specifically listed) have been met, and that the permittee understands that there are significant penalties for false certification including fine and imprisonment. See 30 TAC § 312.47(a)(4)(A)(ii) or 30 TAC § 312.47(a)(5)(A)(ii), as applicable, and to the permittee's specific sludge treatment activities.
- b. The location, by street address, and specific latitude and longitude, of each site on which sludge is applied.
- c. The number of acres in each site on which bulk sludge is applied.
- d. The date and time sludge is applied to each site.

- e. The cumulative amount of each pollutant in pounds/acre listed in Table 2 applied to each site.
- f. The total amount of sludge applied to each site in dry tons.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

F. Reporting Requirements

The permittee shall report annually to the TCEQ Regional Office (MC Region 5) and Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division, by September 30 of each year the following information:

1. Results of tests performed for pollutants found in either Table 2 or 3 as appropriate for the permittee's land application practices.
2. The frequency of monitoring listed in Section I.C. that applies to the permittee.
3. Toxicity Characteristic Leaching Procedure (TCLP) results.
4. Identity of hauler(s) and TCEQ transporter number.
5. PCB concentration in sludge in mg/kg.
6. Date(s) of disposal.
7. Owner of disposal site(s).
8. Texas Commission on Environmental Quality registration number, if applicable.
9. Amount of sludge disposal dry weight (lbs/acre) at each disposal site.
10. The concentration (mg/kg) in the sludge of each pollutant listed in Table 1 (defined as a monthly average) as well as the applicable pollutant concentration criteria (mg/kg) listed in Table 3 above, or the applicable pollutant loading rate limit (lbs/acre) listed in Table 2 above if it exceeds 90% of the limit.
11. Level of pathogen reduction achieved (Class A or Class B).
12. Alternative used as listed in Section I.B.3.(a. or b.). Alternatives describe how the pathogen reduction requirements are met. If Class B sludge, include information on how site restrictions were met.
13. Vector attraction reduction alternative used as listed in Section I.B.4.
14. Annual sludge production in dry tons/year.
15. Amount of sludge land applied in dry tons/year.
16. The certification statement listed in either 30 TAC § 312.47(a)(4)(A)(ii) or 30 TAC § 312.47(a)(5)(A)(ii) as applicable to the permittee's sludge treatment activities, shall be attached to the annual reporting form.

17. When the amount of any pollutant applied to the land exceeds 90% of the cumulative pollutant loading rate for that pollutant, as described in Table 2, the permittee shall report the following information as an attachment to the annual reporting form.
 - a. The location, by street address, and specific latitude and longitude.
 - b. The number of acres in each site on which bulk sewage sludge is applied.
 - c. The date and time bulk sewage sludge is applied to each site.
 - d. The cumulative amount of each pollutant (i.e., pounds/acre) listed in Table 2 in the bulk sewage sludge applied to each site.
 - e. The amount of sewage sludge (i.e., dry tons) applied to each site.

The above records shall be maintained on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

**SECTION III. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE
DISPOSED IN A MUNICIPAL SOLID WASTE LANDFILL**

- A. The permittee shall handle and dispose of sewage sludge in accordance with 30 TAC § 330 and all other applicable state and federal regulations to protect public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present. The permittee shall ensure that the sewage sludge meets the requirements in 30 TAC § 330 concerning the quality of the sludge disposed in a municipal solid waste landfill.
- B. If the permittee generates sewage sludge and supplies that sewage sludge to the owner or operator of a municipal solid waste landfill (MSWLF) for disposal, the permittee shall provide to the owner or operator of the MSWLF appropriate information needed to be in compliance with the provisions of this permit.
- C. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the sewage sludge disposal practice.
- D. Sewage sludge shall be tested once during the term of this permit in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I (Toxicity Characteristic Leaching Procedure) or other method, which receives the prior approval of the TCEQ for contaminants listed in Table 1 of 40 CFR § 261.24. Sewage sludge failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal.

Following failure of any TCLP test, the management or disposal of sewage sludge at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Remediation Support Division and the Regional Director (MC Region 5) of the appropriate TCEQ field office within 7 days after failing the TCLP Test.

The report shall contain test results, certification that unauthorized waste management has stopped and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Registration, Review, and Reporting Division (MC 129), Texas Commission on Environmental Quality, P. O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. This annual report shall be submitted to the TCEQ Regional Office (MC Region 5) and the Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30 of each year.

- E. Sewage sludge shall be tested as needed, in accordance with the requirements of 30 TAC Chapter 330.
- F. Record keeping Requirements

The permittee shall develop the following information and shall retain the information for five years.

1. The description (including procedures followed and the results) of all liquid Paint Filter Tests performed.
2. The description (including procedures followed and results) of all TCLP tests performed.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

G. Reporting Requirements

The permittee shall report annually to the TCEQ Regional Office (MC Region 5) and Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30 of each year the following information:

1. Toxicity Characteristic Leaching Procedure (TCLP) results.
2. Annual sludge production in dry tons/year.
3. Amount of sludge disposed in a municipal solid waste landfill in dry tons/year.
4. Amount of sludge transported interstate in dry tons/year.
5. A certification that the sewage sludge meets the requirements of 30 TAC § 330 concerning the quality of the sludge disposed in a municipal solid waste landfill.
6. Identity of hauler(s) and transporter registration number.
7. Owner of disposal site(s).
8. Location of disposal site(s).
9. Date(s) of disposal.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

OTHER REQUIREMENTS

1. The permittee shall employ or contract with one or more licensed wastewater treatment facility operators or wastewater system operations companies holding a valid license or registration according to the requirements of 30 TAC Chapter 30, Occupational Licenses and Registrations and in particular 30 TAC Chapter 30, Subchapter J, Wastewater Operators and Operations Companies.

This Category C facility must be operated by a chief operator or an operator holding a Category C license or higher. The facility must be operated a minimum of five days per week by the licensed chief operator or an operator holding the required level of license or higher. The licensed chief operator or operator holding the required level of license or higher must be available by telephone or pager seven days per week. Where shift operation of the wastewater treatment facility is necessary, each shift that does not have the on-site supervision of the licensed chief operator must be supervised by an operator in charge who is licensed not less than one level below the category for the facility.

2. The facility is not located in the Coastal Management Program boundary.
3. The permittee is hereby placed on notice that this permit may be reviewed by the TCEQ after the completion of any new intensive water quality survey on Segment No. 0605 of the Neches River Basin and any subsequent updating of the water quality model for Segment No. 0605, in order to determine if the limitations and conditions contained herein are consistent with any such revised model. The permit may be amended, pursuant to 30 TAC § 305.62, as a result of such review. The permittee is also hereby placed on notice that effluent limits may be made more stringent at renewal based on, for example, any change to modeling protocol approved in the TCEQ Continuing Planning Process.
4. The permittee shall provide facilities for the protection of its wastewater treatment facilities from a 100-year flood.
5. In accordance with 30 TAC §319.9, a permittee that has at least twelve months of uninterrupted compliance with its bacteria limit may notify the commission in writing of its compliance and request a less frequent measurement schedule. To request a less frequent schedule, the permittee shall submit a written request to the TCEQ Wastewater Permitting Section (MC 148) for each phase that includes a different monitoring frequency. The request must contain all of the reported bacteria values (Daily Avg. and Daily Max/Single Grab) for the twelve consecutive months immediately prior to the request. If the Executive Director finds that a less frequent measurement schedule is protective of human health and the environment, the permittee may be given a less frequent measurement schedule. For this permit, 1/month may be reduced to 1/quarter. **A violation of any bacteria limit by a facility that has been granted a less frequent measurement schedule will require the permittee to return to the standard frequency schedule and submit written notice to the TCEQ Wastewater Permitting Section (MC 148).** The permittee may not apply for another reduction in measurement frequency for at least 24 months from the date of the last violation. The Executive Director may establish a more frequent measurement schedule if necessary to protect human health or the environment.
6. The permittee shall comply with the requirements of 30 TAC § 309.13 (a) through (d). In addition, by ownership of the required buffer zone area, the permittee shall comply with the requirements of 30 TAC § 309.13(c).

ATTACHMENT D
ED's Response to Public Comment (RTC)

TCEQ INTRA-AGENCY TRANSMITTAL MEMO

DATE: October 28, 2013

TO: FINAL DOCUMENTS TEAM LEADER
OFFICE OF THE CHIEF CLERK
BUILDING F, MC-105

FROM: James Aldredge
ENVIRONMENTAL LAW DIVISION
BUILDING A, MC-173

Attached: Executive Director's Response to Comments

Application Information

Program Area (Air, Water or Waste): Water

Permit No. WQ0013849001 Name: Algonquin Water Resources of Texas, LLC

Docket/CID Item # (if known): _____

CHIEF CLERKS OFFICE

2013 OCT 28 PM 4:13

TEXAS
COMMISSION
ON ENVIRONMENTAL
QUALITY

OCC Action Required (check applicable boxes)

Date stamp and return copy to above-noted ELD Staff Attorney and:

FOR ALL PROGRAM AREAS: (required only when changes needed to official agency mailing list)

Update the mailing list in your file with the attached contact names and addresses

Include corrected or additional names and addresses for mailing list

FOR WASTE & WATER:

X Send Response to Comments Letter which solicits hearing requests and requests for reconsideration to the mailing list in your files

For Waste and Water this would occur in all circumstances when comments have been received for 801 applications

Or

Send Response to Comments Letter and Motion to Overturn Letter which solicits motions to overturn to the mailing list in your files

For Waste and Water this may occur when all comments have been withdrawn for 801 applications or when comments are received for applications that will not be set for agenda.

FOR AIR (NSR only):

Send RTC with response to comments letter which solicits contested case hearing requests and requests for reconsideration to the mailing list in your files

For Air NSR applications this would occur only when there are pending contested case hearing requests (except no-increase renewals)

Set for commission agenda and send RTC with agenda setting letter

This would occur when there are pending contested case hearing requests on a no-increase renewal and technical review is complete.

Hold until a commission agenda date is requested and then send RTC with the Agenda Setting Letter

For Air applications this would occur when there are pending hearing requests on a no-increase renewal; but technical review is NOT complete. If this box is checked, ED staff must call the OCC Agenda Team Leader to arrange a specific agenda date.

Place RTC in File - no further action required by OCC

For Air NSR applications this would occur when the matter is uncontested but comments were received, APD will send a copy with MTO letter

Other Instructions: _____

----- TPDES PERMIT NO. WQ0013849001 -----

APPLICATION BY	§	Before the
ALGONQUIN WATER	§	
RESOURCES OF TEXAS, LLC	§	TEXAS COMMISSION ON
FOR TPDES PERMIT NO.	§	
WQ0013849001	§	ENVIRONMENTAL QUALITY

EXECUTIVE DIRECTOR'S RESPONSE TO PUBLIC COMMENT

The Executive Director of the Texas Commission on Environmental Quality (the Commission or TCEQ) files this Response to Public Comment (Response) on the application by Algonquin Water Resources of Texas, LLC (Applicant) for a major amendment of TCEQ Permit Number WQ0013849001 and on the Executive Director's preliminary decision on the application. As required by Title 30 of the Texas Administrative Code (TAC) Section (§) 55.156, before a permit is issued, the Executive Director prepares a response to all timely, relevant and material, or significant, comments. The Office of Chief Clerk timely received comment letters from **Joe Freeland** on behalf of the City of Tyler and **Brad Castleberry** on behalf of the Upper Neches River Municipal Water Authority. This Response addresses all comments received, whether or not withdrawn. If you need more information about this permit application or the wastewater permitting process, please call the TCEQ Public Education Program at 1-800-686-4040. General information about the TCEQ can be found at our website at www.tceq.texas.gov.

BACKGROUND

Description of Facility

Algonquin Water Resources of Texas, 12725 West Indian School Road, Suite D 101, Avondale, Arizona 85392, has applied to the TCEQ for a major amendment to TCEQ Permit No. WQ0013849001 to authorize a change in the method of effluent disposal from irrigation to discharge into water in the state. The current permit authorizes the disposal of treated domestic wastewater at a daily average flow not to exceed 200,000 gallons per day via surface irrigation system with a minimum area of 72 acres of non-public access grass land. The existing facility is located approximately 1,250 feet northwest of the intersection of State Highway 155 and Farm-to-Market Road 2661 in Smith County, Texas. The Villages Resort facility serves the Villages Resort and commercial customers. The draft permit includes effluent limitations and monitoring requirements for 5-day Carbonaceous Biochemical Oxygen Demand, Total Suspended Solids, Ammonia Nitrogen, *E. coli*, Dissolved Oxygen, chlorine residual, and pH. The treated effluent will be discharged to an unnamed tributary of Rose Branch; thence to Rose Branch; thence to Lake Palestine in Segment No. 0605 of the Neches River Basin. The unclassified receiving water uses are no significant aquatic life use for the unnamed tributary of Rose Branch and high aquatic life use for Rose Branch. The designated uses for Segment No. 0605 are high aquatic life use, public water supply and primary contact

recreation. A Tier 1 and Tier 2 antidegradation review was conducted for this application. Following the review, the Executive Director has preliminarily determined that no lowering of water quality by more than a de minimis extent is expected in Rose Branch or Lake Palestine.

Procedural Background

The application was received on January 03, 2013 and declared administratively complete on February 19, 2013. The Notice of Receipt of Application and Intent to Obtain Water Quality Permit Amendment (NORI) was published on March 14, 2013 in the *Tyler Morning Telegraph* and on March 20, 2013 in *La Opinion*. Following a technical review of the application, the Executive Director prepared a draft permit. The Notice of Application and Preliminary Decision for TPDES Permit for Municipal Wastewater Amendment (NAPD) was published July 21, 2013 in the *Tyler Morning Telegraph* and on July 24, 2013 in *La Opinion* and the comment period closed August 23, 2013. This application was administratively complete on or after September 1, 1999; therefore, this application is subject to the procedural requirements adopted pursuant to House Bill 801 (76th Legislature, 1999).

Access to Rules, Laws and Records

Please consult the following websites to access the rules and regulations applicable to this permit:

Secretary of State website for all administrative rules: www.sos.state.tx.us
TCEQ rules in Title 30 of the Texas Administrative Code: www.sos.state.tx.us/tac
(select "TAC Viewer" on the right, then "Title 30 Environmental Quality")
Texas statutes: <http://www.statutes.legis.state.tx.us/>
TCEQ website: www.tceq.state.tx.us (for downloadable rules in WordPerfect or Adobe PDF formats, select "Rules," then "Current TCEQ Rules," then "Download TCEQ Rules")
Federal rules in Title 40 of the Code of Federal Regulations:
<http://www.epa.gov/lawsregs/search/40cfr.html>
Federal environmental laws: <http://www.epa.gov/lawsregs/laws/index.html>.

Commission records for this facility are available for viewing and copying and are located at TCEQ's main office in Austin, 12100 Park 35 Circle, Building F, 1st Floor (Office of Chief Clerk). The application for this facility has been available for viewing and copying at Tyler Public Library, 201 South College Street, Tyler, Texas, since publication of the NORI and the application draft permit, statement of basis/technical summary, and Executive Director's preliminary decision have been available for viewing and copying at the same location since publication of the NAPD.

If you need more information about this permit application or the wastewater permitting process, please call the TCEQ Public Education Program at 1-800-687-4040. General information about the TCEQ can be found on our website at www.tceq.texas.gov. If you would like to file a complaint about the facility concerning its

compliance with provisions of its permit or with TCEQ rules, you may contact the Agency at 1-888-777-3186 or you may contact the TCEQ Region 5 Office at 903-535-5100. Citizen complaints may also be filed on-line at the TCEQ website (select "Reporting," then "Make an Environmental Complaint"). If the facility is found to be out of compliance it may be subject to enforcement action.

COMMENTS and RESPONSES

COMMENT 1

Joe Freeland expressed concerns related to the effects of this permit amendment on water quality in Lake Palestine, including depressed dissolved oxygen levels, high pH, and high levels of nutrients. Brad Castleberry expressed concerns that increased pollutant loading resulting from this application may result in an impact to water quality in Lake Palestine that could affect human health and the environment and fail to maintain stream standards. Mr. Castleberry commented that, consequently, the draft permit may not be in the public welfare.

RESPONSE 1

In accordance with 30 TAC §307.5 and the TCEQ implementation procedures (January 2003) for the Texas Surface Water Quality Standards, an antidegradation review of the receiving waters was performed. A Tier 1 antidegradation review has preliminarily determined that existing water quality uses will not be impaired by this permit action. Numerical and narrative criteria to protect existing uses will be maintained. A Tier 2 review has preliminarily determined that lowering of water quality by more than a de minimis extent is not expected in Rose Branch and Lake Palestine, which have been identified as having high aquatic life use. Existing uses will be maintained and protected. The preliminary determination can be reexamined and may be modified if new information is received.

Additionally, according to 30 TAC §§ 307.4(d) and 307.6, water in the state shall be maintained to preclude adverse toxic effects on human health resulting from primary contact recreation, consumption of aquatic organisms, consumption of drinking water, or any combination of the three. The proposed permit was developed in accordance with the Texas Surface Water Quality Standards (TSWQS) to be protective of human health, water quality, and the environment provided the Applicant operates and maintains the facility according to TCEQ rules and the proposed permit's requirements. The designated uses and dissolved oxygen criterion for Segment No. 0605, as stated in 30 TAC § 307.10, are primary contact recreation, high aquatic life use, public water supply, and 5 mg/L dissolved oxygen. These uses and criterion protect human health and aquatic organisms, including fish and invertebrates, through permit requirements that will maintain those uses and require compliance with the criterion. The technical review by the TCEQ Standards Implementation Team determined that numerical and narrative criteria in the proposed permit that are designed to protect existing uses will maintain those uses and that lowering of water quality by more than a de minimis extent is not expected in Rose Branch and Lake Palestine.

Segment 0605 is currently listed on the State's inventory of impaired and threatened waters (the 2010 Clean Water Act Section 303(d) list). The listings are for pH in the upper mid-lake including the Tyler Public Water Supply intake (AU 0605_03), in the Flat Creek Arm (AU 0605_09), in the upper lake (AU 0605_10), and in the mid-lake from Flat Creek Arm to SH 155 Bridge (AU 0605_11). This facility when operated properly should not contribute to the elevated pH impairment of the segment. Additionally, the permit was drafted according to applicable guidelines and procedures for 303(d) listed waters and should not contribute to the elevated pH impairment of the stream segment. The treated effluent is not discharged directly into Lake Palestine. The effluent is discharged into an unnamed tributary of Rose Branch and then to Rose Branch approximately one half mile before it reaches Lake Palestine. While nutrients and dissolved oxygen are listed on the State of Texas' inventory under Section 305(b) of the Clean Water Act as constituents which can contribute to water quality impairment, neither has been found to contribute to impairment of Segment No. 0605 for purposes of Section 303(d).

Other Requirement No. 3 in the proposed permit states that:

The permittee is hereby placed on notice that this permit may be reviewed by the TCEQ after the completion of any new intensive water quality survey on Segment No. 0605 of the Neches River Basin and any subsequent updating of the water quality model for Segment No. 0605, in order to determine if the limitations and conditions contained herein are consistent with any such revised model. The permit may be amended, pursuant to 30 TAC § 305.62, as a result of such review. The permittee is also hereby placed on notice that effluent limits may be made more stringent at renewal based on, for example, any change to modeling protocol approved in the TCEQ Continuing Planning Process.

The ED may reopen this permit after issuance to impose any additional effluent limitations if warranted by any subsequent intensive water quality survey of Segment No. 0605.

The proposed permit includes effluent limitations and monitoring requirements for 5-day Carbonaceous Biochemical Oxygen Demand, Total Suspended Solids, Ammonia Nitrogen, *E. coli*, Dissolved Oxygen, chlorine residual, and pH to ensure that the discharge from the wastewater treatment plant meets water quality standards for the protection of surface water quality, groundwater, and human health in accordance with TCEQ rules and policies. The proposed permit includes additional requirements for the wastewater treatment plant to ensure the protection of water quality and human health. Based on ED staff's review of the application considering all applicable procedures to implement Texas Surface Water Quality Standards, the Executive Director has determined that the proposed permit is protective of the environment, water quality, and human health and that it meets TCEQ rules and requirements.

COMMENT 2

Joe Freeland expressed concerns regarding taste and odor issues with public drinking water that is sourced from Lake Palestine.

RESPONSE 2

Pursuant to 30 TAC § 309.3(c), discharges within five miles of the conservation pool level of a reservoir that may be used as a source for public drinking water supply shall achieve, at a minimum, enhanced secondary treatment as defined in 30 TAC § 309.4. The effluent set for enhanced secondary treatment, based on a 30-day average, are 10 mg/L carbonaceous biochemical oxygen demand (CBOD₅), 15 mg/L total suspended solids (TSS) and 4.0 mg/L minimum dissolved oxygen (DO). The effluent limitations in the proposed permit, based on a 30-day average, are 10 mg/L CBOD₅, 15 mg/L TSS, 3 mg/L NH₃-N, 126 CFU or MPN of *E. coli* per 100 ml and 4.0 mg/L minimum DO. The effluent shall contain a chlorine residual of at least 1.0 mg/L and shall not exceed a chlorine residual of 4.0 mg/L after a detention time of at least 20 minutes based on peak flow.

Texas Water Code, § 26.027 authorizes the TCEQ to issue permits for discharges into or adjacent to water in the state, so long as any permitted discharge is protective of the water quality of the State's rivers, lakes and coastal waters. If a proposed discharge would result in a violation of a water quality standard, the TCEQ cannot issue the permit. As part of the application process, TCEQ determines the uses of the receiving water and sets effluent limits to be protective of those uses. The effluent limits in the proposed draft permit are set to maintain and protect the existing instream uses for Lake Palestine. The existing instream uses for Lake Palestine/Segment No. 0605 are primary contact recreation, high aquatic life, and public water supply. *See* 30 TAC § 307.10, Appendix A.

COMMENT 3

Joe Freeland expressed concerns that the proposed flow rate and associated treatment capacity of the facility are inadequate and may not meet TCEQ minimum design criteria.

RESPONSE 3

Plans and specifications for domestic sewage collection and treatment works associated with any domestic permit must be approved by TCEQ. The Applicant "is required to build a wastewater collection system or treatment facility according to the plans and specifications approved by the executive director" and "ensure that its facility plans and specifications meet all design requirements in the associated wastewater permit." 30 TAC § 217.5(a) and (d). However, the Applicant is "not required to submit collection system or treatment facility plans and specifications for approval prior to the Commission issuing the facility's wastewater permit." 30 TAC § 217.6(a). Plans and specifications for a treatment facility "must be based on a design that will produce

effluent that will at least meet the requirements and effluent limits in the associated wastewater permit." 30 TAC § 217.6(a).

Operational Requirements in the proposed permit state that when the flow reaches 75 percent of the permitted daily average flow for three consecutive months, the Applicant must initiate engineering and financial planning for expansion or upgrade of the domestic wastewater treatment or collection facilities. When the flow reaches 90 percent of the permitted daily average flow for three consecutive months, the Applicant must obtain authorization from TCEQ to begin constructing the necessary additional treatment or collection facilities. See 30 TAC § 305.126(a). The Applicant is subject to potential enforcement action for failure to comply with TCEQ rules or the permit.

COMMENT 4

Joe Freeland expressed concerns that the draft permit does not contain sufficient provisions to ensure compliance with applicable regulations by the Applicant in light of previous TCEQ enforcement actions regarding another facility owned by the Applicant.

RESPONSE 4

Under TWC §26.0281, the Commission must consider an applicant's compliance history when considering whether to issue or amend a permit to discharge effluent comprised primarily of sewage or municipal waste. The Executive Director reviewed the Applicant's compliance history and determined that the Applicant's history is rated as satisfactory. The Applicant received a rating of .42 and the Villages Resort facility received a rating of 1.00. Ratings between .10 and 55.00 fall within the satisfactory classification. A satisfactory rating means that the Applicant and the Villages Resort facility generally comply with the applicable environmental regulations. 30 TAC § 60.2.

Additionally, the permit requires the Applicant to take certain steps to minimize the possibility of an accidental discharge of untreated wastewater. For example, the Applicant must maintain adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failures by means of alternate power sources, standby generators, or retention of inadequately treated wastewater. Permit provisions are designed to help prevent unauthorized discharges of raw sewage.

If an unauthorized discharge occurs, the Applicant is required to report it to TCEQ within 24 hours. Finally, the Applicant is subject to potential enforcement action for failure to comply with TCEQ rules or the permit.

COMMENT 6

Brad Castleberry commented that the Applicant did not identify the reason it requested authorization to change its method of disposal from land application to discharge to water in the state.

RESPONSE 6

TCEQ does not have authority to mandate a different method of disposal if the applicant's proposed discharge complies with the TWC and TCEQ's rules.

COMMENT 7

Brad Castleberry expressed concerns related to nuisance.

RESPONSE 7

The draft permit does not limit the ability of nearby landowners to use common law remedies for trespass, nuisance, or other causes of action in response to activities that may or do result in injury or adverse effects on human health or welfare, animal life, vegetation, or property, or that may or actually do interfere with normal use and enjoyment of animal life, vegetation, or property.

COMMENT 8

Brad Castleberry expressed concerns related to odor.

RESPONSE 8

TCEQ rules require domestic wastewater treatment facilities to control nuisance odors according to 30 TAC § 309.13(e). These rules provide three options for applicants to satisfy the nuisance odor abatement and control requirement. An applicant can meet this requirement by obtaining ownership of the buffer zone area, by obtaining a restrictive easement from the adjacent property owners for any part of the buffer zone not owned by the Applicant, or by providing odor control. In its application, the Applicant stated that it intends to meet the buffer zone requirements by obtaining ownership of buffer zone areas as required under 30 TAC § 309.13(e)(3). Other Requirement No. 6 in the proposed permit requires the Applicant to comply with the nuisance odor requirements in 30 TAC § 309.13(e) by ownership of the required buffer zone area.

Minimizing the nuisance odors from a treatment plant depends partly on the design of the plant and the operation and maintenance of the plant. Maintaining an adequate dissolved oxygen concentration in the early stages of treatment helps to minimize nuisance odor. Aeration basins and aerobic digesters are the primary means of odor control at treatment plants of any size. This proposed wastewater treatment plant will be an aerobic biological process. Aerobic biological processes use oxygen to reduce the organic content of the wastewater through biological action. Oxygen turns sulfide compounds (the most common odor-causing compounds) into odorless sulfates. Wastewater without dissolved oxygen can produce offensive odors. The proposed permit requires that the effluent contain a minimum of 4.0 mg/L of dissolved oxygen. In addition, the proposed permit contains operational requirements to ensure the facility is properly operated and maintained.

Additionally, the proposed permit requires the treated effluent to be disinfected by chlorination in accordance with TCEQ rules. The major benefit of chlorine in wastewater treatment is disinfection of the wastewater, but it is also helpful in controlling odor. Nuisance odors may be associated with organic matter and the biochemical oxygen demand exerted on the receiving stream. The effluent limitations in the proposed permit are more stringent than the enhanced secondary treatment, which removes the vast majority of the oxygen demanding constituents and decreases the likelihood of nuisance odor.

The TCEQ has procedures specifically designed for odor investigation. For more information on the odor investigation procedures or to file a nuisance odor complaint, please visit the TCEQ website at: http://www.tceq.state.tx.us/compliance/complaints/odor_complaint.html. To report complaints about the facility, you may also contact the TCEQ Regional Office in Tyler, Texas at 903-535-5100.

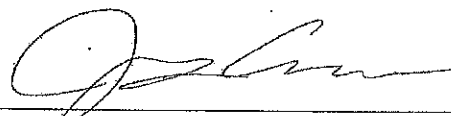
No changes to the draft permit have been made.

Respectfully submitted,

Texas Commission on Environmental
Quality

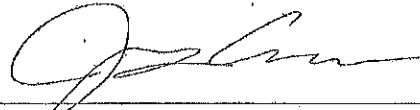
Zak Covar
Executive Director

Robert Martinez, Director
Environmental Law Division

By 
James Aldredge, Staff Attorney
Environmental Law Division
State Bar No. 24058514
P.O. Box 13087, MC 173
Austin, Texas 78711-3087
512-239-2496
Representing the Executive Director of the
Texas Commission on Environmental
Quality

CERTIFICATE OF SERVICE

I certify that on October 28, 2013, the "Executive Director's Response to Public Comment" for Permit No. **WQ0013849001** was filed with the Texas Commission on Environmental Quality's Office of the Chief Clerk.



James Aldredge, Staff Attorney
Environmental Law Division
State Bar No. 24058514

ATTACHMENT E
Compliance History Report



The TCEQ is committed to accessibility.

To request a more accessible version of this report, please contact the TCEQ Help Desk at (512) 239-4357.



Compliance History Report

PUBLISHED Compliance History Report for CN602882839, RN102076270, Rating Year 2013 which includes Compliance History (CH) components from September 1, 2008, through August 31, 2013.

Customer, Respondent, or Owner/Operator:	CN602882839, Algonquin Water Resources of Texas, LLC	Classification: HIGH	Rating: 0.00
Regulated Entity:	RN102076270, THE VILLAGES RESORT	Classification: HIGH	Rating: 0.00
Complexity Points:	3	Repeat Violator: NO	
CH Group:	08 - Sewage Treatment Facilities		
Location:	FM 2661 TYLER, TX 75701, SMITH COUNTY		
TCEQ Region:	REGION 05 - TYLER		
ID Number(s):			
WASTEWATER PERMIT WQ0013849001	WASTEWATER EPA ID TX0134252		
Compliance History Period:	September 01, 2008 to August 31, 2013	Rating Year: 2013	Rating Date: 09/01/2013
Date Compliance History Report Prepared:	February 19, 2014		
Agency Decision Requiring Compliance History:	Enforcement		
Component Period Selected:	January 03, 2008 to February 19, 2014		
TCEQ Staff Member to Contact for Additional Information Regarding This Compliance History.			
Name: Alicia Ramirez	Phone: (512) 239-1000		

Site and Owner/Operator History:

- 1) Has the site been in existence and/or operation for the full five year compliance period? YES
- 2) Has there been a (known) change in ownership/operator of the site during the compliance period? NO
- 3) If YES for #2, who is the current owner/operator? N/A
- 4) If YES for #2, who was/were the prior owner(s)/operator(s)? N/A
- 5) If YES, when did the change(s) in owner or operator occur? N/A

Components (Multimedia) for the Site Are Listed in Sections A - J

A. Final Orders, court judgments, and consent decrees:

N/A

B. Criminal convictions:

N/A

C. Chronic excessive emissions events:

N/A

D. The approval dates of investigations (CCEDS Inv. Track. No.):

N/A

E. Written notices of violations (NOV) (CCEDS Inv. Track. No.):

A notice of violation represents a written allegation of a violation of a specific regulatory requirement from the commission to a regulated entity. A notice of violation is not a final enforcement action, nor proof that a violation has actually occurred.

N/A

F. Environmental audits:

N/A

G. Type of environmental management systems (EMSs):

N/A

H. Voluntary on-site compliance assessment dates:

N/A

I. Participation in a voluntary pollution reduction program:

N/A

J. Early compliance:

N/A

Sites Outside of Texas:

N/A